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A REVISION OF MYCTEROMYIINI ("GENUS *MYCTEROMYIA*" OF AUTHORS), A NEW TRIBE OF NEOTROPICAL HORSE FLIES (DIPTERA, TABANIDAE)

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ABSTRACT: Genitalic analyses have confirmed that the group of primitive flies now assigned to the genus *Mycteromyia* Philippi, 1865, in southern South America is composite. A review of species heretofore included here reveals that these flies are to be redistributed taxonomically as follows: of 13 species recently included in the genus under the primitive tribe Scionini (subfamily Pangoniinae), 2 are excluded as discussed below and only 3 are questionably retained in the tribe, but in the revived (previously synonymized) genus *Caenopangonia* Kroeber, namely *hirtipalpis* (Bigot) (type-species), *brevirostris* (Philippi), and *asper* (Philip). The remaining 8 accepted species, plus 7 previously undescribed, are distributed in the new tribe Mycteromyiini, also of subfamily Pangoniinae, among 3 genera: *Promycteromyia* new genus for *P. philippii* (Philip) (type-species, new combination), *P. galbina* new species (♂, ♀, Chile), *P. derocerca* new species (♂, ♀, Chile), *P. eriodes* (Philip) (new combination), *P. cinerascens* (Bigot) (new combination), *P. pechumani* new species (♂, ♀, Chile), *P. penai* new species (♂, ♀, Chile), *P. murina* (Philippi) (new combination), and *P. xantha* new species (♂, Chile); *Mycteromyia* for *M. conica* (Bigot) (type-species) and *M. etcheverryae* new species (♂, ♀, Chile); and revived *Silvestriellus* for *S. patagonicus* Brèthes (type-species), *S. schlingeri* new species (♂, ♀, Argentina), *S. martinezi* (Barretto and Duret) (new combination), and *S. flaviventris* (Barretto and Duret) (new combination). *Mycteromyia bejaranoi* Barretto and Duret is newly synonymized with *C. hirtipalpis* (Bigot). *Pangonia obscuripennis* Philippi, assigned by Kroeber (1934) to *Mycteromyia* and retained there by Fairchild (1971), is not included here, nor is *Mycteromyia robusta* Kroeber; we considered neither to belong in this revised group.

INTRODUCTION

It has become evident that there is more supra-specific diversity than previously supposed in the genus *Mycteromyia* Philippi, a group of primitive flies occurring in southern South America. We now consider certain characters that were until recently considered common to the group to be of polyphyletic origin, such as: wide fronts in *both* sexes, elongate, basally hinged proboscides not armored for "biting," long wings with isolated clouds and closed first posterior (R_5) cells, and often produced, snout-like faces (from which Philippi derived his generic name—"nose-fly").

Because of our discovered heterogeneity in the *Mycteromyia* group, we realized that any proposed systematic revision would be dependent on the identity of the nominate type-species of this genus. This presents a nomenclatural problem that only can be resolved by ultimate action of the International Commission on Zoological Nomenclature (ICZN).

THE TYPE-SPECIES OF THE GENUS *Mycteromyia*.—*Pangonia conica* Bigot from Chile was

the only species included in the original generic characterization by Philippi (1865), though he described several other species in the genus. Without further characterization except in a generic key, Enderlein (1922) designated *P. conica* as the type-species of *Mycteromyia*. The same designation was repeated in the neotropical catalog of Kroeber (1934) and by Hack (1953) in discussing the genus in Argentina.

This concept was inadvertently changed by Fairchild (1971:12) when he stated, "Type species, *Pangonia conica* Bigot [(]Enderlein, 1922:340) = *philippii* Philip." Philip (1958) described *M. philippii* (syn. *M. conica sensu* Philippi, not Bigot) after discovering and confirming (1968) that Philippi had misidentified *P. conica* Bigot. As shown below, the real *M. conica* (Bigot) was inexplicably redescribed as *M. fusca* by Philippi. Following ICZN Articles 67 and 70a, which cover misidentifications of type-species, the International Commission has been petitioned (Philip, 1977) to use its plenary powers to declare *P. conica* Bigot as the type-species of *Mycteromyia* Philippi, (not *sensu* Philippi = *philippii* Philip). Genitalic study has shown that the two concepts are not congeneric so that the potential consequences of the ICZN decision are not trivial. Pending Commission action on the above petition, we shall continue to use the type-species concept in use prior to 1971 as permitted by the Rules.

Within this group of flies, we find that genitalic characters support retention of only three species in the heterogeneous tribe Scionini, i.e., *hirtipalpis* Bigot, *brevirostris* Philippi, and *asper* Philip, with their more conventional, nonproduced faces, and in males, nonbulbous terminalia. These have been reassigned to the revalidated genus *Caenopangonia* Kroeber. Among the remaining known species of "*Mycteromyia*," plus others described below, we have found very peculiar genitalic characters. Some of them are more primitive than in most more highly evolved Tabanidae, and others approach those in the family Pelecorhynchidae, which merit their taxonomic separation at least at the tribal level. On morphological evidence, we believe that this generalized group may resemble hypothetical ancestors of known tabanids. This group has some plesiomorphic characters, some of which also occur in certain other dipterous families, such as the pelecorhyncids. We consider the latter to have more primitive genitalic characters than the more specialized, higher Tabanidae. This opinion is reinforced by the restricted, relict-type of species distribution in southern Chile and Argentina. There are also apomorphic characters which facilitate separation of different taxa.

We are dividing the new tribe Mycteromyiini into the most generalized genus *Promycteromyia* new genus, *Mycteromyia* Philippi, the type-genus, and the revived genus *Silvestriellus* Brèthes. The order of textual treatment of taxa attempts to follow our concept of evolvement of characters from generalized to the more specialized in different groups.

We frequently use textual abbreviations for structures like T. IX, T. X, or St. VIII in reference to respective tergites and sternites. "Soft abdomens" are those having less rigid sclerotization than usual. Symbols used in the figures are explained with initial usage (Figs. 1 and 2).

Characters and symbols that relate to male genitalia are: in external ("visible") view, the bulbous epandrium shield (Figs. 1*B* and 1*C*, ep), cerci (Figs. 1*B* and 1*C*, ce); internal view by dissection, gonocoxite (Fig. 1*D*, go), with basistyle (ba) and dististyle (di), aedeagus (ae), apodeme of aedeagus (aa), flagellar aedeagus (fa), and, in some taxa, very peculiar apical styli (st) and inner tuberosities (tu). Female genitalia: after dissection, genital fork (Fig. 3*G*) with peculiar caudal ducts (cd) and "sclerotized portions" (sc), sternite VIII (St. VIII), cerci (Fig. 1*F*, ce), tergites IX and X (T. IX, T. X); T. IX with unusual lateral expansions termed by us, lateral "flaps" (lf). Genitalic structures are thus discussed from two aspects: external, *in situ*, and internal after dissection; "in slide view" refers to mounted preparations of internal structures.

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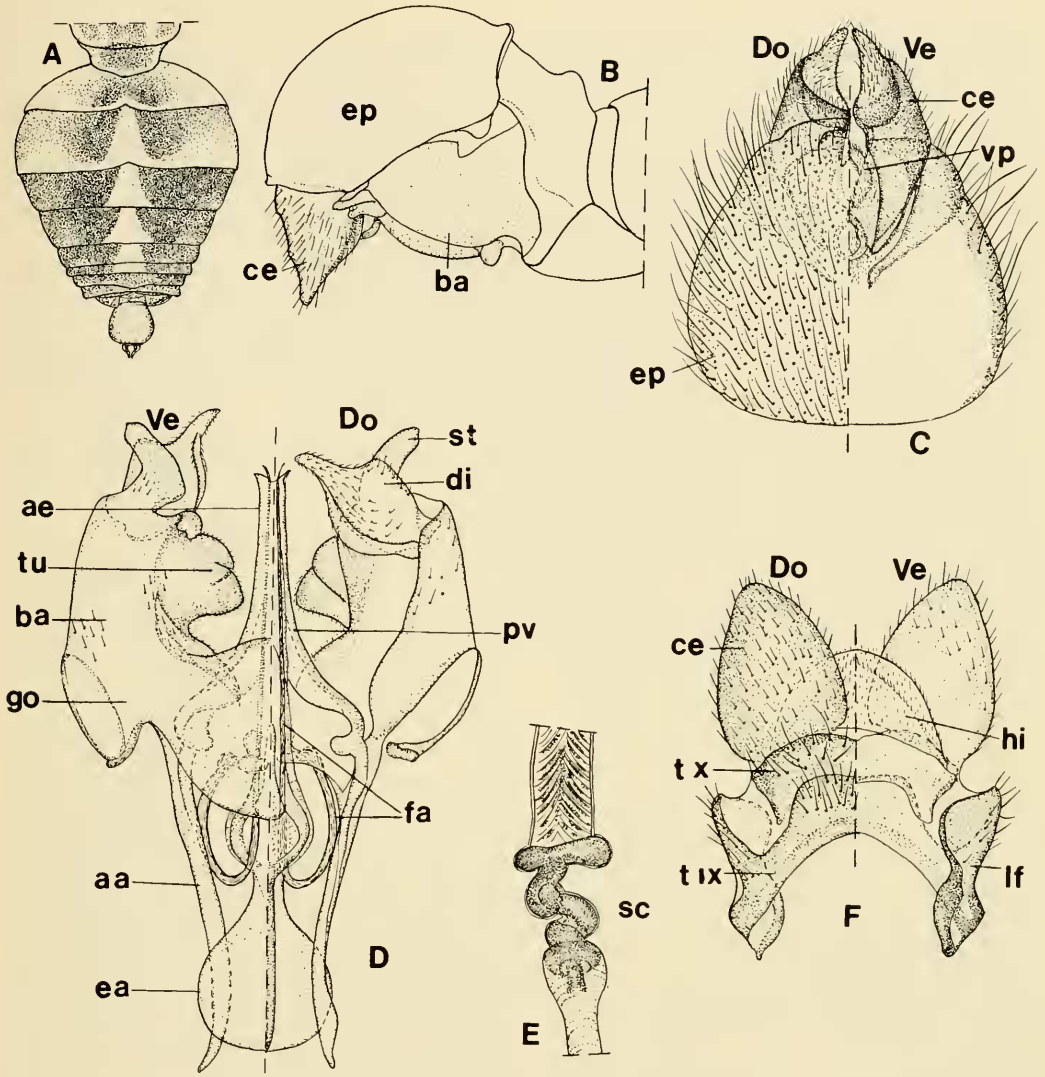

FIGURE 1. *Promycteromyia philippii* (Philip). Male (*A–D*), female (*E, F*). *A*. Abdomen, dorsum. *B*. Epandrium and genital appendages, lateral view. *C*. Epandrium and cerci in slide view. *D*. Gonapophyses and genital appendages. *E*. Spermathecal duct. *F*. Genital appendages. Abbreviations: aa, aedeagal apodeme; ae, aedeagus; ba, basistyle; ce, cercus; di, dististyle; Do, dorsal view, ea, endophallic apodeme; ep, epandrium; fa, flagellar aedeagus; go, gonocoxite; hi, hypoproct; lf, lateral flap; pv, penis valve; sc, sclerotized portion; st, style; tix, tergite IX; tu, tuberosity; tx, tergite X; Ve, ventral view; vp, ventral plate of proctiger.

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Abbreviations of depositories of specimens are as follows: CAS—California Academy of Sciences, San Francisco; CEEUC—Centro de Estudios Entomológicos, Universidad de Chile, Santiago; LLP—Collection of Dr. L. L. Pechuman, Ithaca; MACN—Museo Argentino de Ciencias Naturales "Bernardino Rivadavia," Buenos Aires; MLP—Museo La Plata, La Plata; MNHN—Museo Nacional de Historia Natural, Santiago; MZSP—Museu de Zoologia da Universidade de São Paulo; NMW—Naturhistorisches Museum Wien.

MYCTEROMYIINI, new tribe

DIAGNOSIS.—Species mostly grayish or yellowish to brown, thorax usually with four notal

stripes, and abdomen with middorsal row of pale triangles; body elongated, especially in females, and sometimes with soft abdomens; wings elongated with clouds accentuated on cross veins, first posterior (R_5) cells closed and petiolate, spur veins present; legs long, particularly the fore pair, including fore coxae, hind tibiae with two apical spurs; eyes bare, unicolorous (relaxed), those of males widely dichoptic, facets undifferentiated in size; three relatively compact and elevated ocelli at vertex; fronts of females about as wide as high with no basal callosities but with some rugosities above subcalli; subcalli elongated and with lateral hairs; faces produced conically, snoutlike, without denuded areas; parafacials narrow; antennae subulate with 8-annulate flagellums; palpi subcylindrical or flattened with short hairs and subapical "sensorial grooves" (containing numerous microscopic organelles); proboscides long, basally with unusual hinge-type articulations, shafts and labella strongly sclerotized and extensile; maxillae nonserrated. Male interoptic "fronts" narrower with longer hairs than in respective females.

Male genitalia (for terms, refer to Fig. 1): Abdomen abruptly narrowed from segment IV or V and bulbous terminally, T. IX–X shield-shaped, not retracted beneath T. VII, as is usual, and basally straight or convex; cerci projected distally; branches of gonapophyses (basistyli) incompletely sclerotized, membranous on inner surfaces, and ventrally with apical styli, plus tuberosities on inner bases; flagellar aedeagus strongly extended cephalad; apodeme of aedeagus spatulate with mid-longitudinal keel. Female: T. IX undivided and with peculiar "flaps" projecting distally; T. X frequently undivided; genital forks weakly sclerotized, especially basally, and with small comb-teeth; caudal ends of spermathecal ducts with peculiar, intermediate sclerotized parts, continued as long tubes covered by what we term "small alimentary tubules," and apically, neither bulbous nor sclerotized; St. VIII wide, frequently with basal portion very curved and strongly sclerotized laterally; gonapophyses small, subglobose and well sclerotized; no externally visible cerci projected over gonapophyses.

Generalized, nonhaematophagous, flower feeders.

Promycteromyia Coscarón and Philip, new genus

Type-species.—*Mycteromyia philippii* Philip

Diagnosis.—Species grayish to dark grayish yellow or blackish. Male: Basistyli with tuberosities inwardly below; dististyli spoon-shaped; aedeagus funnel-shaped (dorsal view), gonapophyses basoventrally strongly curved cephalad, and well sclerotized basolaterally. Female: T. X undivided; St. VIII with a strongly curved, well-sclerotized base projected laterally.

Included Species.—*Promycteromyia philippii* (Philip), *P. galbina* new species, *P. derocerca* new species, *P. eriodes* (Philip), *P. cinerascens* (Bigot), *P. pechumani* new species, *P. penai* new species, *P. murina* (Philippi), and *P. xantha* new species.

Promycteromyia philippii (Philip), new combination

(Figure 1)

Mycteromyia philippii Philip, 1958:63.
Mycteromyia conica: Philippi (not Bigot), 1865:712.

Diagnosis.—Medium-large, blackish species, abdomen dark brown dorsally, black haired, gray pollinose and pale pilose on T. I, on basal half of T. II, and on mid-stripe of truncated triangles, as well as often on lateral incisures (Fig. 1*A*). Beard pale pilose; ventrally, thorax and abdomen, coxae and femora brownish black with black hairs; pleura grayish pollinose, pale haired.

Description.—Male. Lengths 12–13 mm, wings 10–11 mm, proboscides 5–8 mm, ratio palpus:wing 1:7–9. Genitalia: Visible cercus subtriangulate with rounded apex (Fig. 1*B*), in slide view with small external emargination (Fig. 1*C*); style strongly curved with wide base, dististyle relatively short with strong emargination on distal border and with a strong ridge on proximal border (Fig. 1*D*).

Female. Lengths 12–15 mm, wings 10.5–13 mm, proboscides 6.5–8.5 mm, ratio palpus:wing 1:9.5–10. Genitalia: S. VIII with deep concavity basally and gonapophyses strongly sclerotized; cercus subtriangulate; T. IX short, with large lateral flaps (Fig. 1*F*); sclerotized portions of ends of caudal parts of spermathecal ducts with "twists" that are continued caudad in the ducts (Fig. 1*E*).

Material Examined (all from CHILE).—*Coquimbo*: 1 paratype female, El Sauce, Elqui, 5.XI.1937 (E. P. Reed); 2 males, 1 female, El Pangue, 3.XI.1961 (Peña); 1 female, El Pangue, 29.X.1937 (Reed); 1 female, El Tongay, Huanaquero, 28.XI.1952; 15 females, Hacienda Illapel, El Calabazo, 21–22.XI.1961 (Peña); 2 females, Hacienda Illapel, Canela Baja, 23–24.X.1961 (Peña); 1 female, Socos, 13.X.1957 (Peña), and

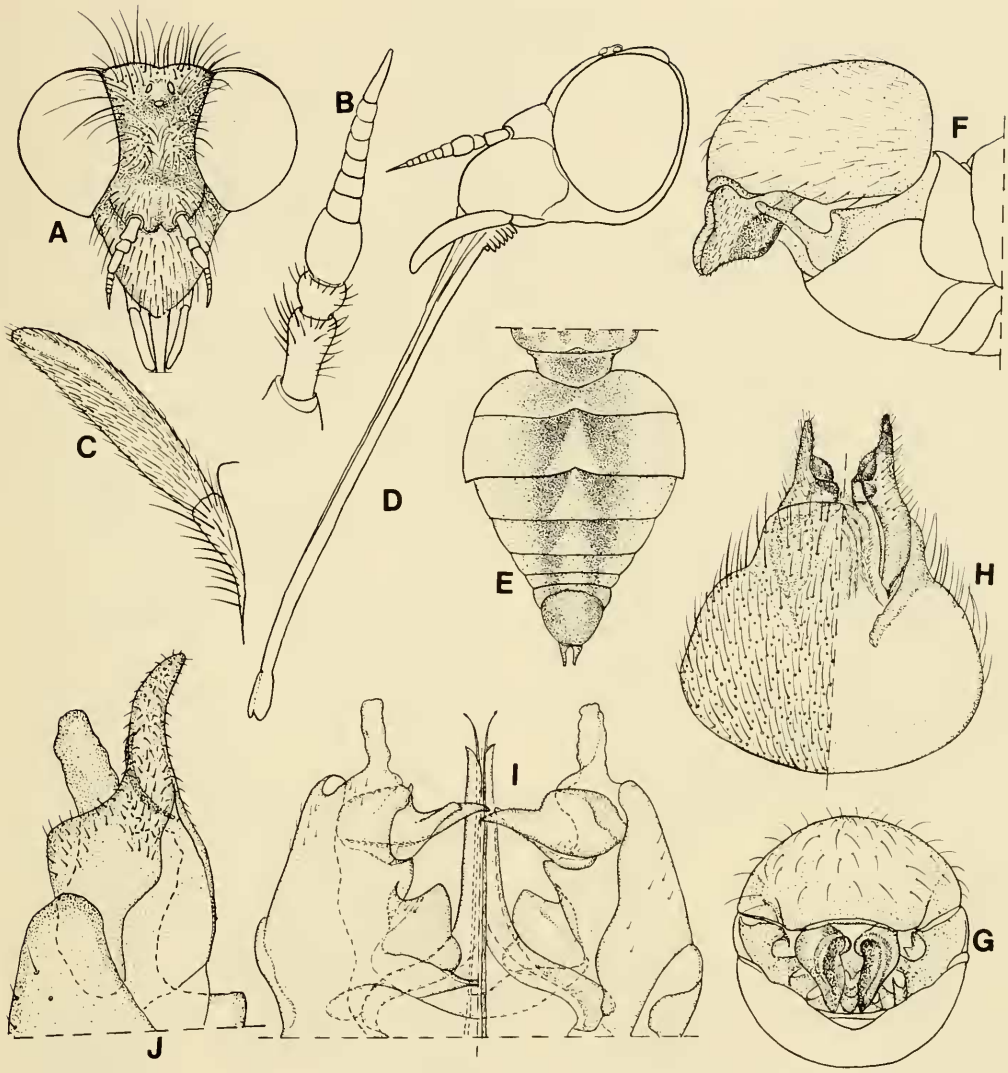


FIGURE 2. *Promycteromyia galbina* new species, male. *A*. Head. *B*. Antenna. *C*. Palpus. *D*. Head in profile. *E*. Abdomen, dorsum. *F*. Epandrium and genital appendages. *G*. Epandrium and cerci, caudal view. *H*. Epandrium, cerci and ventral plate in slide view. *I*. Basistyli, dististyli and aedeagus. *J*. Dististyle, dorsal view.

2 males, 1 female, same data but 16.IX.1963; 1 female, Cuesta de los Hornos, 18.X.1958 (Peña); 1 female, 8 km N San Pedro de Quile, 16–17.XI.1961 (Peña); 1 female, "Entrance to the Tunnel Aconcagua," 90 km S Illapel, 28.XI.1950 (Ross and Michelbacher). *Atacama*: 1 female, Quebrada del Algodonero, 18.X.1957 (Peña).

Promycteromyia galbina Coscarón and Philip, new species

(Figure 2)

DIAGNOSIS.—Medium-sized, grayish-yellow species; mid-abdominal stripe of connected triangles with wide bases and long pale hairs on T. II–VI, enclosed in a wide, brown-haired stripe and with longer yellow hairs on sides (Fig. 2*E*); venter gray-brown.

DESCRIPTION.—Holotype male. Length 13 mm, wing 10.5 mm, proboscis 8.4 mm, ratio palpus:wing 1:8.2. Front and face grayish with small lateral brown bands; front (Fig. 2*A*) with long black hairs above; scape and pedicel (Fig. 2*B*) gray pollinose; palpus (Fig. 2*C*) with black and yellow pile; proboscis (Fig. 2*D*) dark brown.

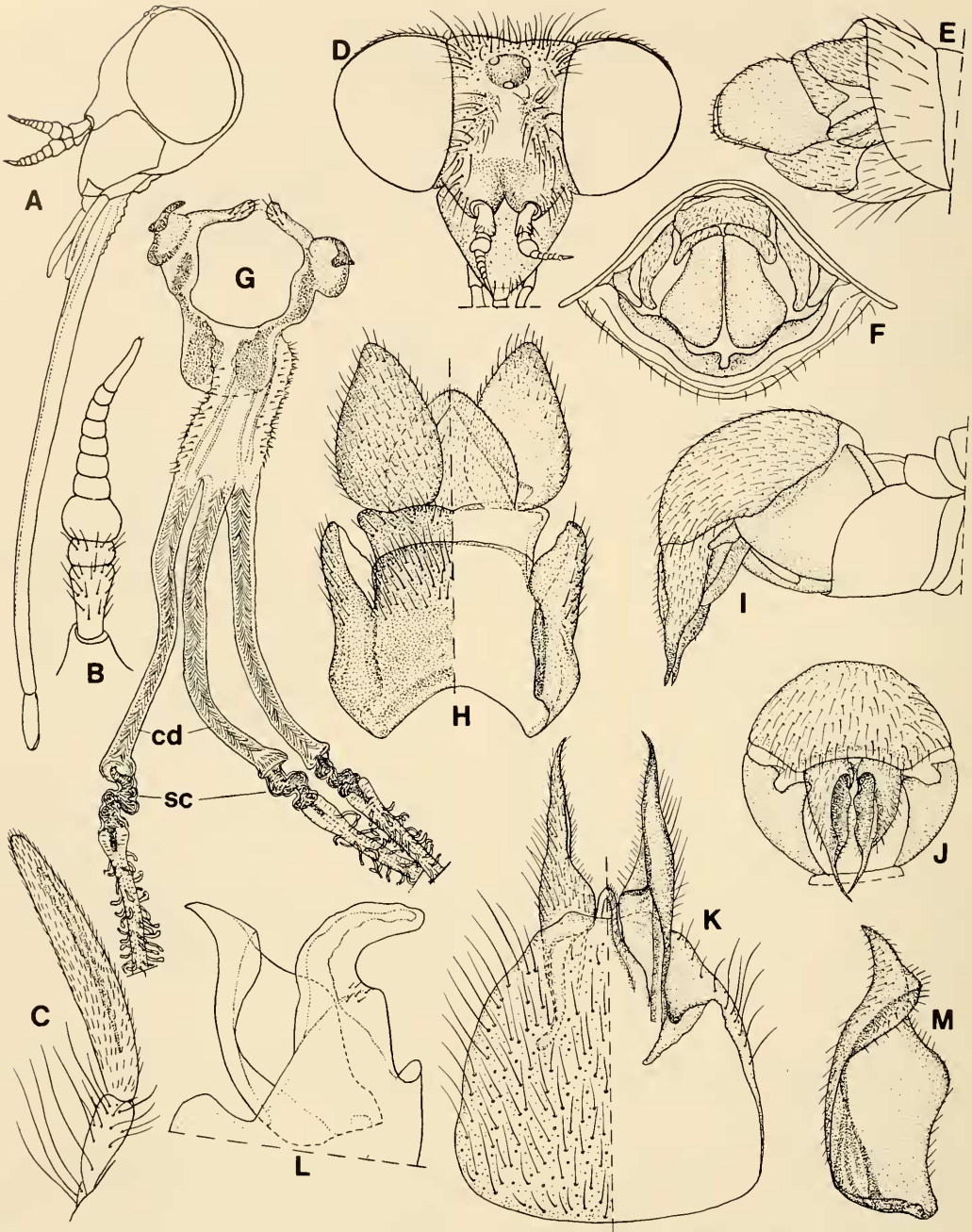


FIGURE 3. *Promycteromyia derocerca* new species. Female (*A–H*), male (*I–M*). *A*. Head in profile. *B*. Antenna. *C*. Palpus. *D*. Head. *E*. External genital appendages, lateral view. *F*. Same, caudal view. *G*. Genital fork; cd, caudal spermathecal ducts; sc, sclerotized portions (twisted). *H*. Genital appendages. *I*. Genital appendages, lateral view. *J*. Same, caudal view. *K*. Epandrium and cerci in slide view. *L*. Style and dististyle. *M*. Dististyle, ventral view.

Notum grayish with four prominent brown stripes and sparse yellow and black hairs; gray-brown, gray pollinose, and yellow pilose ventrally. Coxae and basal halves of femora gray, black distally, tibiae and tarsi yellowish to pale brown with yellow hairs. Wings subhyaline, cross veins with very faint clouds; spur veins a little longer than stems.

Allotype female. In close agreement with holotype, but legs darker and tergites grayer laterally. Length 13.5 mm, wing 11 mm, proboscis 7.5 mm, ratio palpus:wing 1:8.7. Genitalia: Cerci subtriangulate, T. IX tall, but a little less so than in *P. derocerca*, and flaps more sinuous laterally; T. X with a median depression, St. VIII as in *P. eriodes* but deeper; genital fork as in *P. cinerascens* but more sclerotized basally; caudal spermathecal ducts very elongated, sclerotized portions unknown.

Paratype males. Very close to holotype in ornamentation. Lengths 12.5–13 mm, wings 10–10.5 mm, proboscides 7.5–8.5 mm, ratio palpus:wing 1:8–8.8. Genitalia: Visible cerci subtriangulate with rounded apices, emarginate on anterior and posterior borders (Figs. 2*F* and 2*G*), in slide view, cerci are thin distally (Fig. 2*H*); style straight, dististyle with narrow distal portion elongated (Figs. 2*I* and 2*J*).

Type-Series (all from CHILE).—Holotype male. *Coquimbo*: Fray Jorge, 4–5.XI.1951 (Peña) (LLP). Allotype female. Same data as for holotype. Paratypes. 1 male, Fray Jorge, 20.X.1966 (Schlinger and Irwin); 1 male, Fray Jorge, 9.XI.1971 (Pino); 1 male, Fray Jorge, 4–5.XI.1957 (Peña); 1 male, Tongay, Huanaquero, 28.XI.1952; 2 males, El Tongue, 13.X.1957; 1 male, Los Vilos, 13.X.1961; 1 male, Los Vilos to Illapel, -.X.1965 (Peña). (CAS, MLP, and MNHN).

Comments.—This species has a peculiar yellow ornamentation that differs from other related species. *Pangonia obscuripennis* Philippi, which Kroeber (1934) included in *Mycteromyia*, resembles *galbina* in having yellowish abdominal bases and pale middorsal triangles. Philippi's failure to include *P. obscuripennis* in *Mycteromyia* or to mention the closed first posterior cell characteristic of *Mycteromyia* (plus the now-missing type), impels us to omit it from this review.

Promycteromyia derocerca Coscarón and Philip, new species
(Figure 3)

Diagnosis.—Medium-sized, yellowish-brown species with abdomen yellow to reddish brown dorsally, yellow and black haired with brown mid-stripe enclosing a row of continuous, grayish-yellow-haired triangles, venter brown with black hairs; palpi relatively long, and male with conspicuous, elongated cerci, strongly acuminate distally.

Description.—Holotype male. Length 11.5 mm, wing 9 mm, proboscis, 6.5 mm, ratio palpus:wing 1:8. Front and face gray with a brown band on each side, front with long black hairs and some pale-gray ones below, beard pale; antennae black, scapes and pedicels grayish pollinose; palpi and proboscis brownish black. Notum gray with brown stripes and sparse pale and black hairs; scutellum black, gray pollinose, pleura and coxae blackish gray, pale haired. Femora gray-brown to reddish brown apically, tibiae and tarsi lighter yellowish brown with yellow hairs. Wings subhyaline with brown clouds on cross veins, spur veins about twice as long as stems. Epandrium gray-brown with pale hairs.

Paratype males. Lengths 11.5–12.5 mm, wings 8.5–9 mm, proboscides 6–8.5 mm, ratio palpus:wing 1:6–6.5. Ornamentation in good agreement with type; T. I gray laterally, remainder brownish yellow on sides, incisures grayish yellow, epandrium gray-brown. Genitalia: Visible cerci strongly protruded, acuminate hooklike apically (Fig. 3*I*); in slide view, very elongated, more than half length of epandrium shield (Fig. 3*K*); styli very curved (Fig. 3*L*), dististyli elongated (Figs. 3*L*, 3 *M*).

Type-Series (all from CHILE).—Holotype male. *Coquimbo*: Los Lorilos, 21.X.1967 (Peña), CAS Ent. Type No. 12679. Paratypes. Same state, 1 male and 2 females, Cuesta de Buenos Aires, 14.X.1957 (Peña); 1 female, Los Vilos, 26.X.1965; 1 female, Huanaquero, Tongoy, 28.X.1952. (CAS, MLP and LLP).

Comments.—Several poorly preserved female specimens are tentatively included here, but none as types. Two are topotypic; they show some resemblance, except in genitalia, to *P. philippii*, with which they are also sympatric. They have similar brown to black thoraces and abdomens and T. I and II are white pilose. Typical *P. derocerca*, however, are smaller. The specimens have brown-gray beards, as in *P. murina*, which has been taken near Santiago and Curicó, whereas our specimens are from distant Coquimbo. In this group we generally have not seen a species with such a wide distribution. Lengths 11–12 mm, wings 9–10 mm, proboscides 6–7 mm, ratio palpus:wing 1:7.4–8.2. Color of head and appendages as in male, with short gray-brown to whitish hairs on head and beard; head (Figs. 3*A* and 3*D*); antenna (Fig. 3*B*); palpus (Fig. 3*C*), but occasionally (as in males) more acuminate distally, saber-shaped. Thorax grayer than in male, pleura whitish pilose; legs gray to dark brown; tibiae and tarsi mostly with concolorous hairs. Abdomens grayish brown with

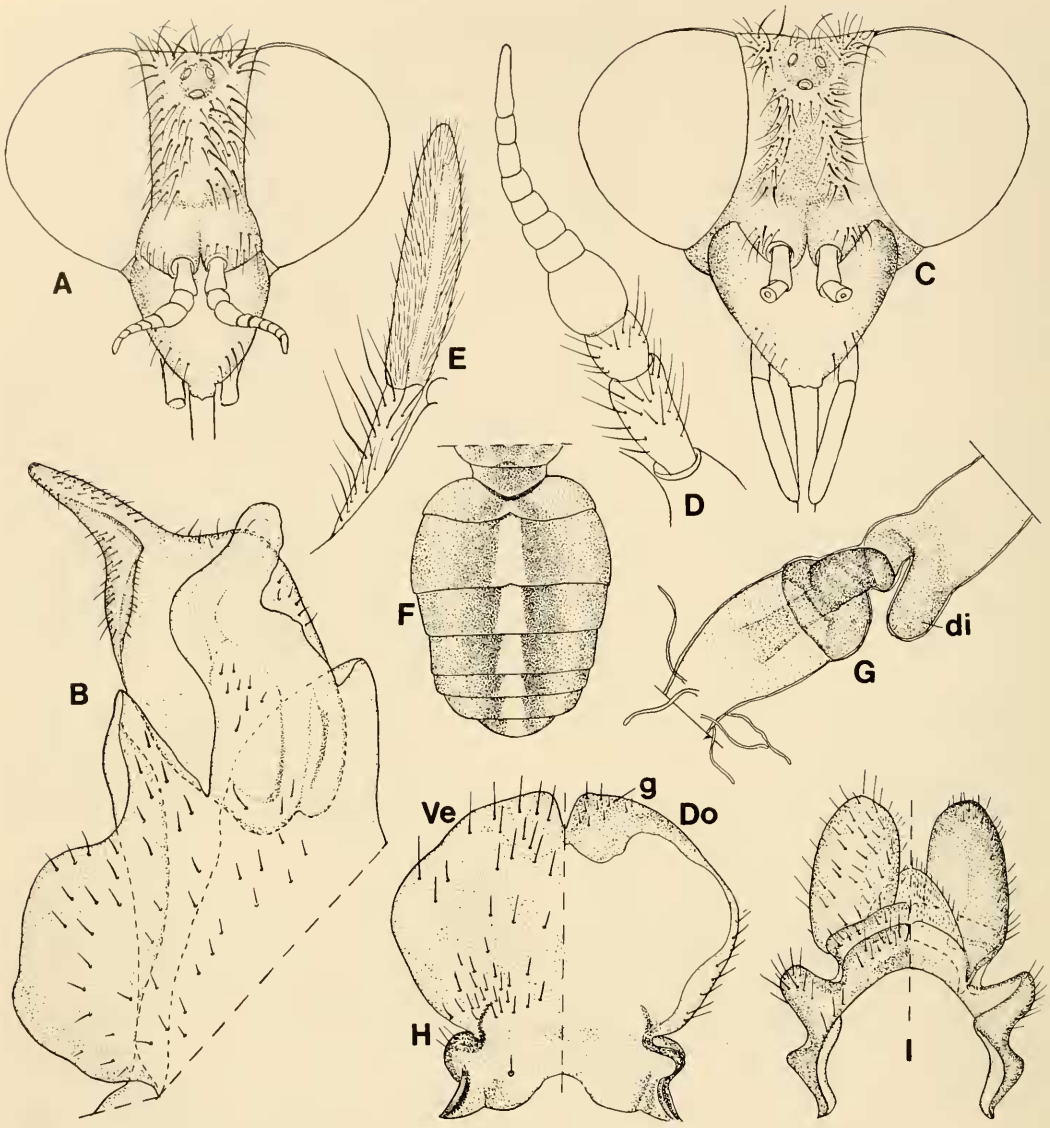


FIGURE 4. *Promycteromyia eriodes* (Philip). Male (*A*, *B*), female (*C–I*). *A*. Head. *B*. Basistyle, tuberosity, style and dististyle, ventral view. *C*. Head. *D*. Antenna. *E*. Palpus. *F*. Abdomen, dorsum. *G*. Sclerotized portion of spermathecal duct; di, diverticle. *H*. Sternite VIII (=subgenital plate) and gonapophyses; Do, dorsal view; g, gonapophyses; Ve, ventral view. *I*. Genital appendages.

pale hairs on median triangles and prominently on lateral incisures of T. I and II over gray-pollinose integument (not yellow as in males). Venters brown with brown and gray hairs. Genitalia: Visible cerci prominent, subtriangulate (Figs. 3*E* and 3*F*), each with an aperture angle of about 90°; T. IX very tall, with lateral flaps weakly sinuous (Fig. 3*H*). Caudal spermathecal ducts very long; sclerotized portions with several twists (Fig. 3*G*). St. VIII as in *P. cinerascens* but more deeply emarginated basomesially.

Promycteromyia eriodes (Philip), new combination

(Figure 4)

Mycteromyia eriodes PHILIP, 1958:66.

As this species was originally described in sufficient detail, only a diagnosis, description of the

male genitalia, and the presumed female characters are given here.

DIAGNOSIS.—Medium-large species; male with unusually woolly appearance due to the shaggy whitish pile over the entire body; presumed female less hairy, abdomen with mostly short grayish-white hairs and a white middorsal stripe bordered by submedian reddish-brown stripes.

DESCRIPTION.—Male. Lengths 13.5–14 mm, wings 10–10.5 mm, proboscides 9 mm, ratio palpus:wing 1:7.5; frontal aspect of head as in Figure 4*A*. Genitalia: Externally subtriangulate with little emargination posteriorly, much as in *P. galbina*; in lateral view, with emargination on inner side very similar to that in *P. cinerascens*. Base of style with two emarginations laterally; dististyle elongated distally with strong emargination posteriorly (Fig. 4*B*).

Female. Lengths 13.5 mm, wings 10.5 mm, proboscides 9 mm, ratio palpus:wing 1:6.5–8. Head and appendages as in male, but with more black frontal hairs; antenna (Fig. 4*D*). Palpi as in male, but not as elongated or pointed distally (Fig. 4*E*). Thorax, legs, and abdomen comparable to male but integumental pilosity more evident beneath sparser vestiture (Fig. 4*F*). Genitalia: St. VIII with a deep median emargination basally (Fig. 4*H*), cerci more subquadrate than in *P. derocerca*. T. IX narrow and flaps strongly sinuous laterally (Fig. 4*I*); caudal portion of spermathecal ducts well sclerotized and with about two twists (Fig. 4*G*).

MATERIAL EXAMINED (all from CHILE).—*Valparaíso*: Holotype and paratypes from Olmué; 1 female, "S. For" (Valparaíso?), 9.IX.1921; 1 female, "A. foz." *Santiago*: 1 female, Peñalolen, 9.II.1944 (Peña). The last specimen is more grayish than the others.

Promycteromyia cinerascens (Bigot), new combination

(Figure 5*A–F*)

Mycteromyia cinerascens BIGOT, 1892:610.

DIAGNOSIS.—Medium-sized, grayish-brown species, abdomen with a wide middorsal brown, black-haired stripe enclosing a row of continuous grayish, pale-haired triangles, and laterally gray on T. I, gray to reddish brown on T. II, and blackish gray on sides of remaining tergites, covered with yellowish-gray hairs; visible cerci trapezoidal-shaped.

DESCRIPTION.—Male. Lengths 10.5–12 mm, wings 8–10 mm, proboscides 6–8 mm, ratio palpus:wing 1:6–7.5. Front and face gray; front with long, mostly black hairs and with a few yellow hairs below; face with shorter yellow hairs; beard yellow to whitish. Antennae black, scapes and pedicels gray pollinose. Palpi gray-black with black and yellow hairs. Thorax brownish gray with yellow to brown hairs dorsally, and yellowish hairs laterally, blackish brown with sparse yellow hairs ventrally; coxae and femora blackish brown with yellow hairs; tibiae and palpi light reddish brown with yellow hairs. Abdomen brownish black with pale incisures ventrally. Genitalia: Cerci externally as figured (Fig. 5*A*); in slide view, emarginated inwardly (Fig. 5*B*); styli gently curved, attenuated on apical halves, dististyli elongated on fore border, slightly emarginated (Fig. 5*C*).

Female. Lengths 10.5–13 mm, wings 9.5–11.5 mm, proboscides 5.5–6 mm, ratio palpus:wing 1:9.3–10. Head and appendages as in male, but front (as in related species) wider and shorter haired. Hairs of palpi yellowish to black, of beard white to yellow, of thorax brownish gray; pleura mostly whitish haired; coxae and femora grayish black with black and white hairs; tibiae and tarsi brownish gray with black pile. Abdomen as in male but lateral pale areas more restricted and grayish with mostly pale pilosity; venter light gray to brown with sparse pale hairs. Genitalia: St. VIII concave, base not strongly emarginated mesially (Fig. 5*E*), cerci subtriangulate, T. IX with very sinuous-margined flaps laterally (Fig. 5*F*); genital fork sclerotized basolaterally, and with very long, peculiar spermathecal ducts that are occasionally sclerotized on the anterior halves, the ends of the sclerotized portions with one to two twists (Fig. 5*D*).

MATERIAL EXAMINED (all from CHILE).—*Santiago*: 7 males, 2 females, Aculeo, El Arbol, -.X.1969 (Peña). *Valparaíso*: 1 male, 20 km N Concon, 26.XI.1950 (Ross and Michelbacher); 1 male, Cuesta de Llay Llay, 20.X.1961 (Peña). *Valparaíso*?: 6 males, El Noviciado, 2–4.X.1954 (Peña). *Coquimbo*: 6 males, Hacienda Illapel, El Calabazo, 21–22.XI.1961 (Peña); 2 males, Canela Baja, 23–24.X.1961 (Peña); 1 male, 3 females, El Tongue, 13.X.1957 (Peña); 1 male, 1 female, Chañaral del Aceituno, 23–25.X.1957 (Peña). *Atacama*: 2 females, Vallenar, 28.IX.1957 (Peña).

COMMENTS.—This species is difficult to characterize because of its variability. Males vary from light gray with pale pile and femora brownish gray with white to darker pile, to reduced pale sides on the abdomen, and tibiae and tarsi brown with black hairs. In females, we observed variation in size, in vestiture more extensively pale brown, and in legs paler on tibiae and tarsi;

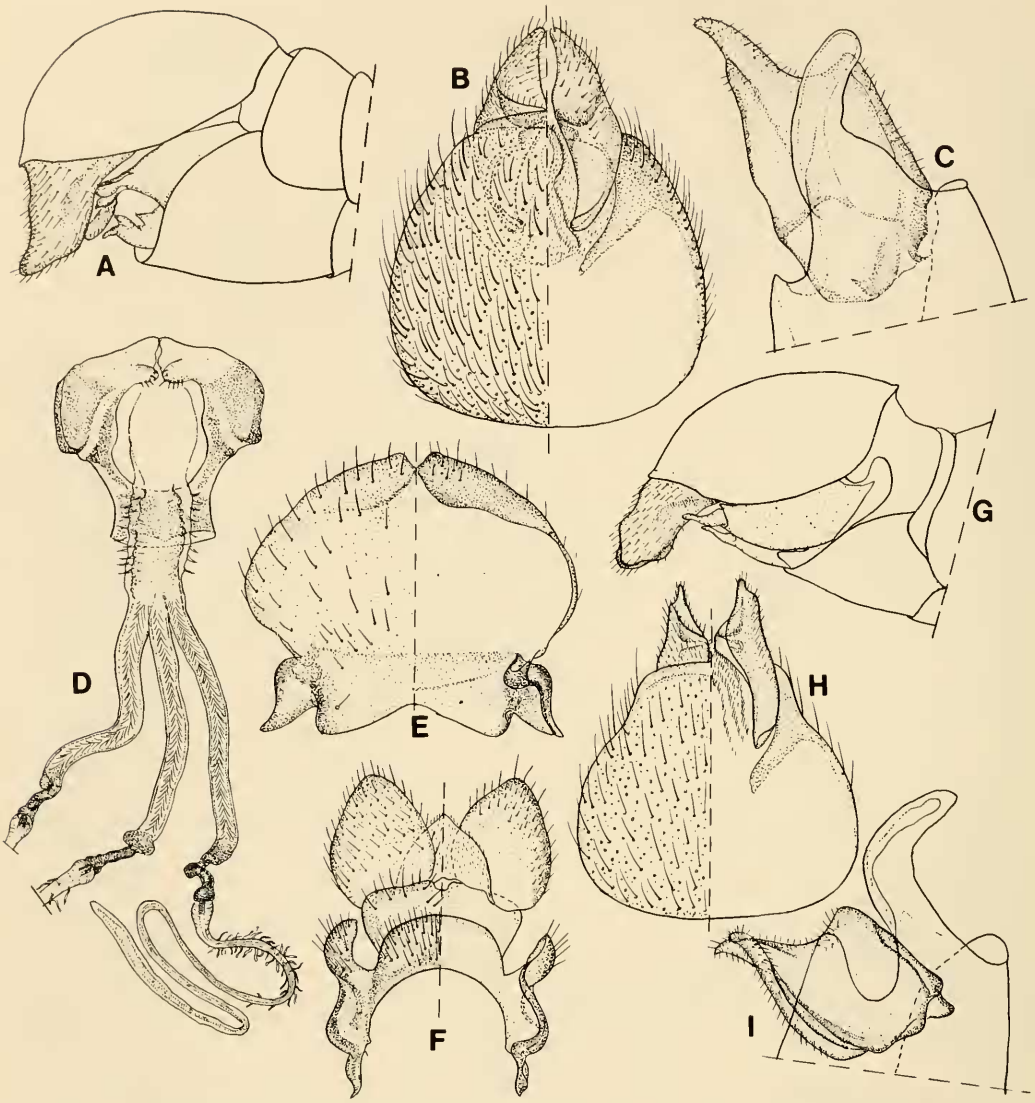


FIGURE 5. *Promycteromyia cinerascens* (Bigot). Male (*A–C*), female (*D–F*). *A*. External genital appendages. *B*. Epandrium and cerci. *C*. Style and dististyle. *D*. Genital fork and spermathecal ducts. *E*. Sternite VIII and gonapophyses. *F*. Genital appendages. *Promycteromyia pechumani* new species, male. *G*. External genital appendages. *H*. Epandrium and cerci. *I*. Style and dististyle.

thus being very difficult to match with males, especially as this species is sympatric with several related ones.

Promycteromyia cinerascens from Olmué, Valparaíso, was correctly identified by Kroeber (1930a), but Barretto and Duret (1954) mistakenly assigned a male from Rio Negro, Argentina, to this species. Their description and genitalic drawings differ from our interpretation of *P. cinerascens*. The different shapes of cerci and dististyli plus the short styli and valve of the aedeagus with strong bristles relate their specimen to *Silvestriellus* and close to our *S. schlingeri* new species.

Promycteromyia pechumani Coscarón and Philip, new species
(Figure 5*G–I*)

DIAGNOSIS.—Medium-sized, grayish-brown species, homogeneously colored abdomen gray

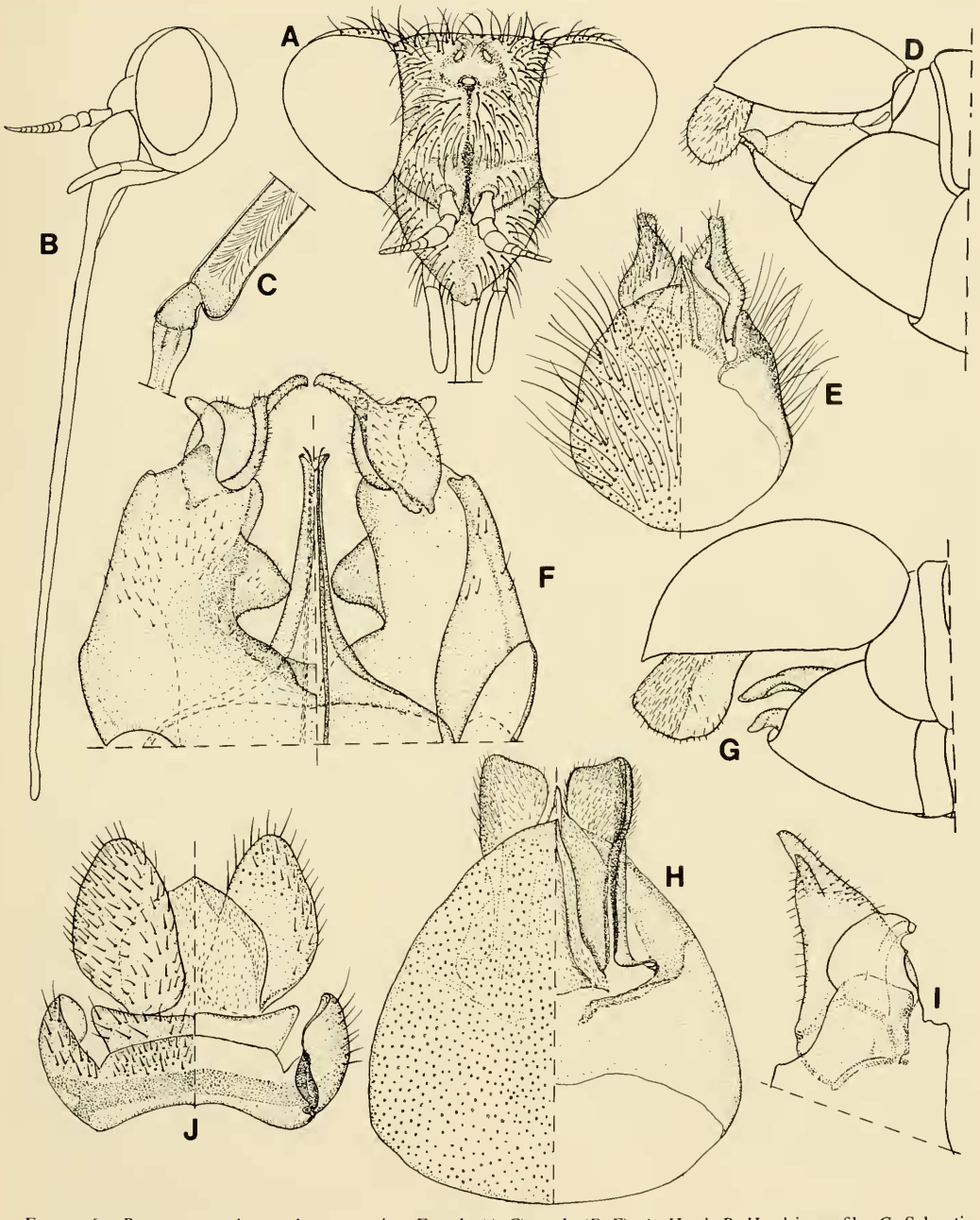


FIGURE 6. *Promycteromyia penai* new species. Female (*A–C*), male (*D–F*). *A*. Head. *B*. Head in profile. *C*. Sclerotized portion of spermathecal duct. *D*. External genital appendages. *E*. Epandrium and cerci. *F*. Basistyli and dististyli. *Promycteromyia murina* (Philippi). Male (*G–I*), female (*J*). *G*. External genital appendages. *H*. Epandrium and cerci. *I*. Style and dististyle. *J*. Genital appendages.

dorsally with middorsal stripe of pale triangles over obscurely marked integument. Vestiture very sparse, grayish yellow on triangles, and flanked by darker, sparse, mixed brown and black hairs; laterad of triangles on T. II and III are black to brown hairs which do not form the usual continuous, wide brown stripes observed in most related species. Visible cerci of male

with small emarginations above and below distally (Fig. 5*G*).

Description.—Holotype male. Length 12.5 mm, wing 10.5 mm, proboscis 7 mm, ratio palpus:wing 1:9.5. Front dark gray with black hairs above, brownish below and on face. Palpus blackish-gray pollinose with black hairs. Thorax brownish gray with intermixed black and yellow hairs. Pleura, femora and coxae brownish-gray pollinose with pale hairs, femora a little lighter than coxae, tibiae and tarsi light brown with brownish-black hairs. Venter dark gray with paler incisures and pilosity.

Allotype female. In good agreement with male but without brown pattern. Length 13 mm, wing 11 mm, proboscis 8.5 mm, ratio palpus:wing 1:8.5. Genitalia very close to *P. cinerascens* but with St. VIII less sclerotized, cerci more subquadrate, and flaps of T. IX more sinuous laterally; sclerotized portion of caudal spermathecal ducts lightly sclerotized.

Paratype males. Agree with holotype although abdominal pattern sometimes more evident. Lengths 11.5–12.5 mm, wings 9–10 mm, proboscides ca. 8 mm, ratio palpus:wing 1:9. Genitalia: Cerci in slide view with reduced emarginations laterally, acuminate, but rounded apically (Fig. 5*H*), styli thin and curved, dististyli with strong ridge anteriorly and strongly emarginated posteriorly (Fig. 5*I*).

Type-Series (all from CHILE).—Holotype male. *Aconcagua*: Valle de Piuquenes, 14–25.XI.1958 (Peña) (LLP). Allotype female. Same data as holotype. Paratypes. *Aconcagua*: 1 male, topotypic; 1 male, Guardia Vieja, 8.XII.1958 (Peña); (CAS and MLP).

Comments.—This species can be differentiated from *P. derocerca, P. cinerascens*, and *P. murina* by its homogeneous gray color, and from *P. penai* new species by lacking coarse pile and by having wide cerci with two subapical emarginations. This species is dedicated to L. L. Pechuman who provided much of the material utilized in this study.

Promycteromyia penai Coscarón and Philip, new species

(Figure 6*A–F*)

Diagnosis.—Small, gray-colored species with sparse but unusually erect pale hairs, second segments of palpi shorter than antennal flagella (Fig. 6*B*), visible cerci rounded or truncated in males.

Description.—Holotype male. Length 10 mm, wing 9 mm, proboscis 5.5 mm, ratio palpus:wing 1:11. Front gray with mostly yellow hairs, some black ones above; subcallus and face pale gray with yellow hairs. Thorax, coxae, and femora brownish gray with pale hairs; tibiae and palpi yellowish brown with whitish hairs. Abdomen gray with double rows of paired, submedian, discontinuous brown spots, narrowed caudad. Venter gray with pale pile.

Allotype female. Agrees well with holotype; length 10.5 mm, wing 9 mm, proboscis 5.5 mm, ratio palpus:wing 1:9.

Paratypes. Males agree with the holotype. Male genitalia: Visible cerci a little longer than wide with distal margin rounded or truncated (Fig. 6*D*); in slide view, dorsobasally narrowed distally and ventrally (Fig. 6*E*); styli thin and curved, dististyli strongly emarginated, thin and elongated distally (Fig. 6*F*). Female also with similar ornamentation. Head as in Figure 6*A*. Female genitalia: St. VIII as in *P. cinerascens*, but with a median emargination basally and less sclerotized laterally, cerci subtriangulate, T. IX shorter then in *P. galbina*, and flaps not very sinuous laterally, T. X weakly sclerotized with only one diverticle (Fig. 6*C*).

Type-Series (all from CHILE).—Holotype male. *Coquimbo*: Choros Bajos, 31.X.1961 (Peña), CAS Ent. Type No. 12680. Allotype female. Same data as for holotype. Paratypes. 1 male, Los Loritos, 26.X.1957 (Peña); 1 male, 2 females, Chanaral del Aceituno, 15–23.X.1957; (CAS, LLP and MLP).

Comments.—Coloration very similar to *P. pechumani* new species except lacking yellow tones, but the smaller size, greater hairiness, shorter palpi, and different external shapes of cerci, permit differentiation. This species is dedicated to Luis E. Peña, our Chilean entomological friend, who originally collected most of our study material, much of which was loaned through the courtesy of Dr. L. L. Pechuman.

Promycteromyia murina (Philippi), new combination

(Figure 6*G–J*)

Mycteromyia murina Philippi, 1865:713.

Philip (1968) saw and redescribed the presumed male type of this species in the Museo Nacional de Historia Natural in Santiago. It lacked the original author's labels and was selected from other similarly unlabelled "Types"

by Kuschel from among the Philippi specimens and could therefore be questionable. This "type," according to Philip (1968:12), has a peculiar "dark brown beard, chest hairs and femora," "abdomen, including the venter is dull black," and "visible cerci rounded and coarsely black-haired, not pointed apically as in *cinerascens*." Among specimens known to us which fit this description and with rounded cerci, we have two candidate groups: one group of specimens from the Coquimbo area, with a smaller, grayish-hirsute body, and the other from Santiago and Curicó with a larger, brown, and less hirsute body. We assign, as first revisors, the second group to *murina*.

DIAGNOSIS.—Medium-sized species with blackish to brownish-gray abdomens, and wide, distally rounded or truncated cerci in males.

DESCRIPTION.—Male. Lengths 12.5–13.5 mm, wings 8–10 mm, proboscides 8–9 mm, ratio palpus:wing 1:7–7.4. Front gray with black hairs above to yellowish brown below, beard varying from black to mixed brown and yellowish gray; distal article of palpus a little longer than antennal flagellum; thorax brownish gray, notal hairs brown to yellow and pleura pale; coxae and femora dark with black to grayish-yellow hairs, tibiae and palpi reddish brown with mixed black and gray pilosity. Abdominal integument gray to brownish yellow dorsally with paired brownish submedian dashes margining gray median triangles. Tergite 1 and epandrium brownish gray. Abdominal vestiture pale dorsally. Venter mostly blackish brown with black hairs and paler incisures. Genitalia: Visible cerci approximately as wide as high, with rounded or truncated margins (Fig. 6*G*): in slide view, subquadrate, and truncated distally (Fig. 6*H*). Styli relatively shorter than in *P. penai*, approximately as wide as high; dististyli elongated, weakly emarginated caudad and cephalad (Fig. 6*I*).

Female. Lengths 13.5–14 mm, wings 12–13 mm, proboscides 8–8.5 mm, ratio palpus:wing 1:7.8–8.4. Color resembles that in the male with similar variations, but abdominal sides mostly yellow. Genitalia: St. VIII with shape as in *P. cinerascens*, but with smaller median concavity, and less sclerotization laterally. Cerci subquadrate, T. IX wide, nonsinuous laterally and with a peculiar transverse, subbasal, sclerotized bar (Fig. 6*J*); genital fork with a moderately sclerotized base; caudal spermathecal ducts elongated, with sclerotized portions not twisted, and with only one lateral diverticle.

MATERIAL EXAMINED (all from CHILE).—*Santiago*: 1 male, Maipu, Quebrada de La Plata, 11.X.1966 (Schlinger and Irwin); Curicó: 1 male, El Coigo, -.II.1961 (Peña); 1 male, El Buchen, 12.II.1961 (Peña); 1 male, 1 female, Teno River, 19–20.I.1964 (Peña); 1 male, Vergara River, 2,000–2,300 m, 26.I.1968 (Peña); 1 male, 1 female, La Vinilla, 19.II.1961 (Peña); 3 males, Teno River, 1,800 m, -.II.1965 (Peña).

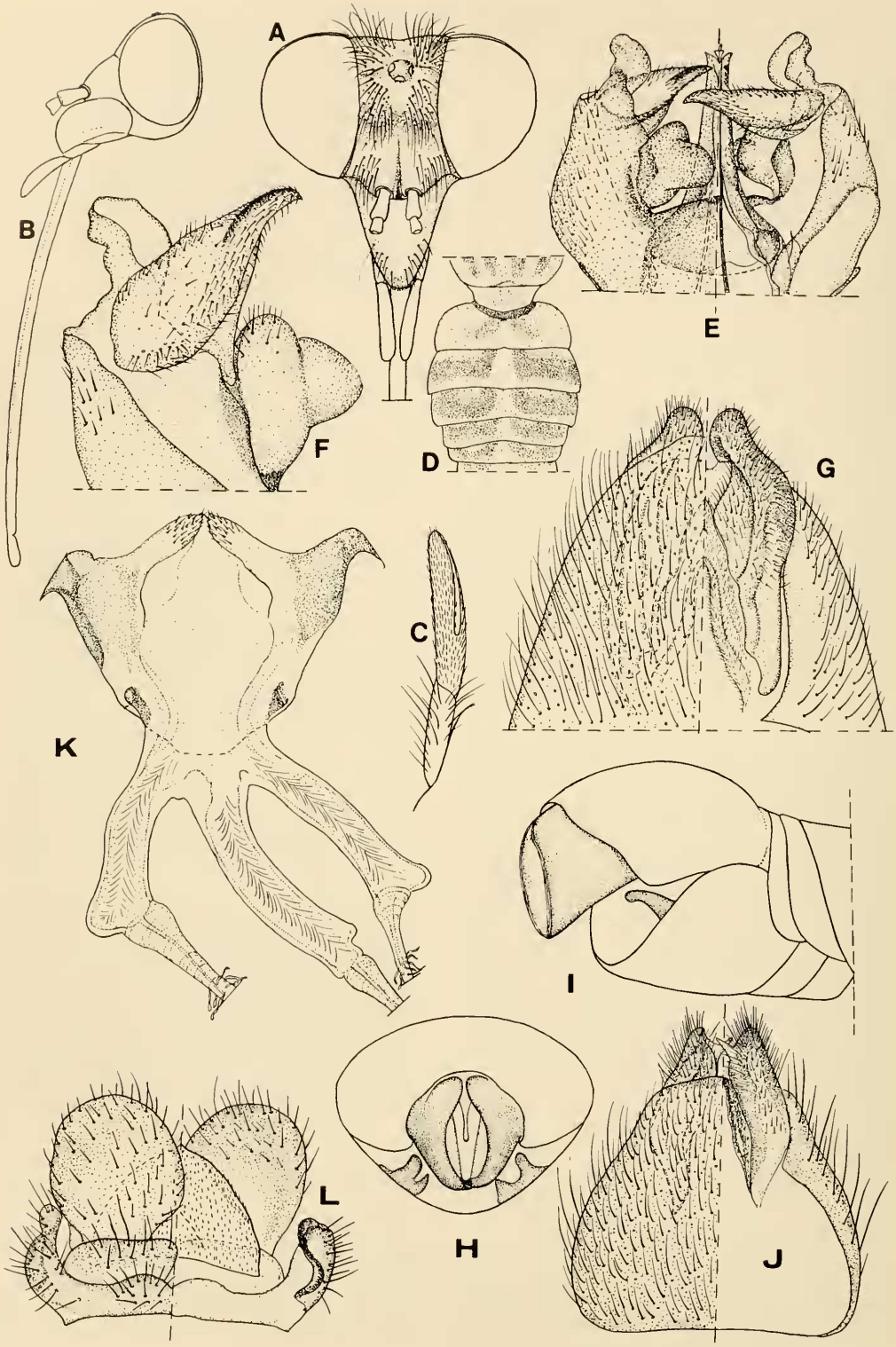
Promycteromyia xantha Coscarón and Philip, new species
(Figure 7*A–G*)

DIAGNOSIS.—Large, soft-bodied, distinctive, light brownish-yellow species, abdomen mostly dark haired except on paler outer incisures, with a brown mid-stripe enclosing a row of discontinuous, pale triangles.

DESCRIPTION.—Holotype male. Length 15.5 mm, wing 12.5 mm, proboscis 7 mm, ratio palpus:wing 1:11.3. Front, scape, pedicel, and palpus yellowish-gray pollinose, frontal pilosity mostly yellow with some darker hairs intermixed; face and subcallus pale yellow. Scape, pedicel, and palpus with black pile; flagellum missing. Front as figured (Fig. 7*A*). Head profile as in Figure 7*B*; palpus relatively short (Fig. 7*C*). Beard and pleura with pale hairs. Notum with brown stripes; scutellum lighter on disk than in *P. murina*, with yellowish and a few black hairs. Wing veins light brown, membrane opalescent. Legs light brown with pale pollinosity; coxae and femora with yellow hairs, while the tibiae and tarsi have dark ones. Mid-abdominal row of pale triangles, T. I and all incisures with yellow pile (Fig. 7*D*). Venter yellowish brown with pale hairs except dark ones on hind margins of St. III–VI. Genitalia: Visible cerci relatively short, narrow, and rounded distally; in slide view, short, curved mesoventrally and rounded distally (Fig. 7*G*); epandrium more flexuous than usual. Styli very curved and thick, dististyli elongated without emargination cephalad or caudad (Figs. 7*E* and 7*F*).

TYPE-DATA.—Holotype male. CHILE, *Talca*: Alto de Vilches, 26–27.I.1964 (Peña), CAS Ent. Type No. 12681.

COMMENTS.—This is a peculiar species, unfortunately only represented by one somewhat damaged but unusual specimen. It can be distinguished by its coloration from all other species of the *Promycteromyia* group that have distinctive tuberosities on the inner sides of the gona-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pophyses. *Caenopangonia brevirostris* (Philippi), which has similar coloration and a soft abdomen, is readily distinguished by its short face.

Genus **Mycteromyia** Philippi

Mycteromyia Philippi, 1865:712. [Type-species: *Pangonia conica* Bigot.]

Description.—Large brown species with long palpi and strongly clouded and tinted wings; male basistyle without tuberosities ventromesially, dististyle subtriangulate without heavy midventral ridge, and with subapical protuberance on anteroventral borders; styli long and straight; aedeagus wide distally with lateral valves smooth; gonapophyses with ventral base slightly convex and not sclerotized laterally. Female T. X divided; St. VIII wider than high, not strongly sclerotized laterally; genital fork without sclerotized base, caudal spermathecal ducts with lateral diverticles.

Included Species.—*Mycteromyia conica* (Bigot) and *M. etcheverryae* new species.

Mycteromyia conica (Bigot)

(Figure 8)

Pangonia conica Bigot, 1858:278.
Mycteromyia fusca Philippi, 1865:712.

Diagnosis.—Large brown species with midabdominal row of pale triangles, wings generally brown and with darker clouds on cross veins (Fig. 8*C*), palpi elongated, saber-shaped.

Description.—Male. Lengths 15–17 mm, wings 14–15 mm, proboscides 10.5–11 mm, ratio palpus:wing 1:7. Female. Lengths 19–20 mm, wings 15.5–17 mm, proboscides 12 mm, ratio palpus:wing 1:7.5–8.5. Front gray pollinose, generally with wide, darker stripe from ocellar tubercle to bases of antennae; face produced snoutlike (Figs. 8*A* and 8*B*), pollinose with wide brown band on each side. Frontal hairs blackish brown, sometimes with a few yellow ones. Scape and pedicel brownish-gray pollinose with black hairs; flagellum reddish brown. Palpus with black hairs. Beard brownish. Notum with prominent brown bands and black to pale haired, pleura brownish-gray pollinose with pale to brownish-black pilosity. Basicosta nonsetulose (Fig. 8*D*). Legs reddish brown to black with pale hairs on coxae and femora, and golden to dark ones on tibiae and tarsi. Abdomen dorsally light to dark brown and dark haired, with median stripe of continuous elongated triangles, and sometimes pale lateral incisures; venter dark brown. Male genitalia: Visible cerci in lateral view triangulate (Fig. 8*F*), in posterior view with apical hooks crossed (Fig. 8*E*); in slide view, subcylindrical (Fig. 8*H*). Style and dististyle as figured (Fig. 8*G*); dististyle with subapical protuberance on anteroventral border, and weakly bifurcated apically. Female genitalia: St. VIII as figured (Fig. 8*M*); cerci subquadrate (Fig. 8*L*). Genital fork as figured (Fig. 8*J*); caudal portions of spermathecal ducts well sclerotized with only one diverticle each (Fig. 8*K*).

Material Examined (all from CHILE).—*Valparaíso*: 2 females, slope of Campana mountain, 1,000 m, 17.XII.1950 (Ross and Michelbacher). *Santiago*: 1 female, El Manzano, -.XI.1951 (Peña); 1 male, El Quisco, 1–3.XI.1951 (Peña); 1 male, 1 female, La Obra, -.XII.1951 (Etcheverry); 1 male, 1 female, El Canelo, 3.XII.1951 (Etcheverry); 5 males, 1 female, El Canelo, -.XI.1951 (Etcheverry); 4 males, 1 female, -.XII.1951 (Etcheverry); 1 female, El Canelo, -.XII.1950 (Etcheverry); 4 males, El Canelo, -.XII.1936; 1 female, El Canelo, -.XI.1951 (Etcheverry); 1 female, Peñalolén, 8.I.1964 (Montero). *Colchagua*: 1 male, Nancagua, -.II.1944 (Peña). *Curicó*: 1 female, Teno River, 6 km E Los Quenes, 5.I.1967 (Irwin). *Malleco*: 1 male, Onate, 29.XI.1958. *O'Higgins*: 1 female, Pangal, 3.I.1964 (Etcheverry); 1 female, Machali, 4.XII.1965 (Silva). *Cautín*: 1 male, Tolten, -.I.1955 (Toro).

Comments.—This species shows much color variation, with the body and appendages varying from dark brown with brown wings to lighter brown with pale outer tergal corners. *Mycteromyia fusca* Philippi was redescribed by Philip (1958) and found to be misdetermined *conica* (Bigot). Philip also redescribed *M. conica sensu* Philippi, not Bigot, as *M. philippii* Philip. Mackerras (1955) made a detailed redescription, including the genitalia, which he considered as so distinctive "as almost to justify removing this genus to a separate tribe."

←

Figure 7. *Promycteromyia xantha* new species, male. *A*. Head. *B*. Head in profile. *C*. Palpus. *D*. Abdomen, dorsum. *E*. Basistyli, dististyli and aedeagus. *F*. Dististyle and tuberosity. *G*. Apical portion of epandrium and cerci. *Mycteromyia etcheverryae* new species. Male (*H–J*), female (*K*, *L*). *H*. Genital appendages, caudal view. *I*. Same, lateral view. *J*. Epandrium and cerci. *K*. Genital fork and caudal spermathecal ducts. *L*. Genital appendages.

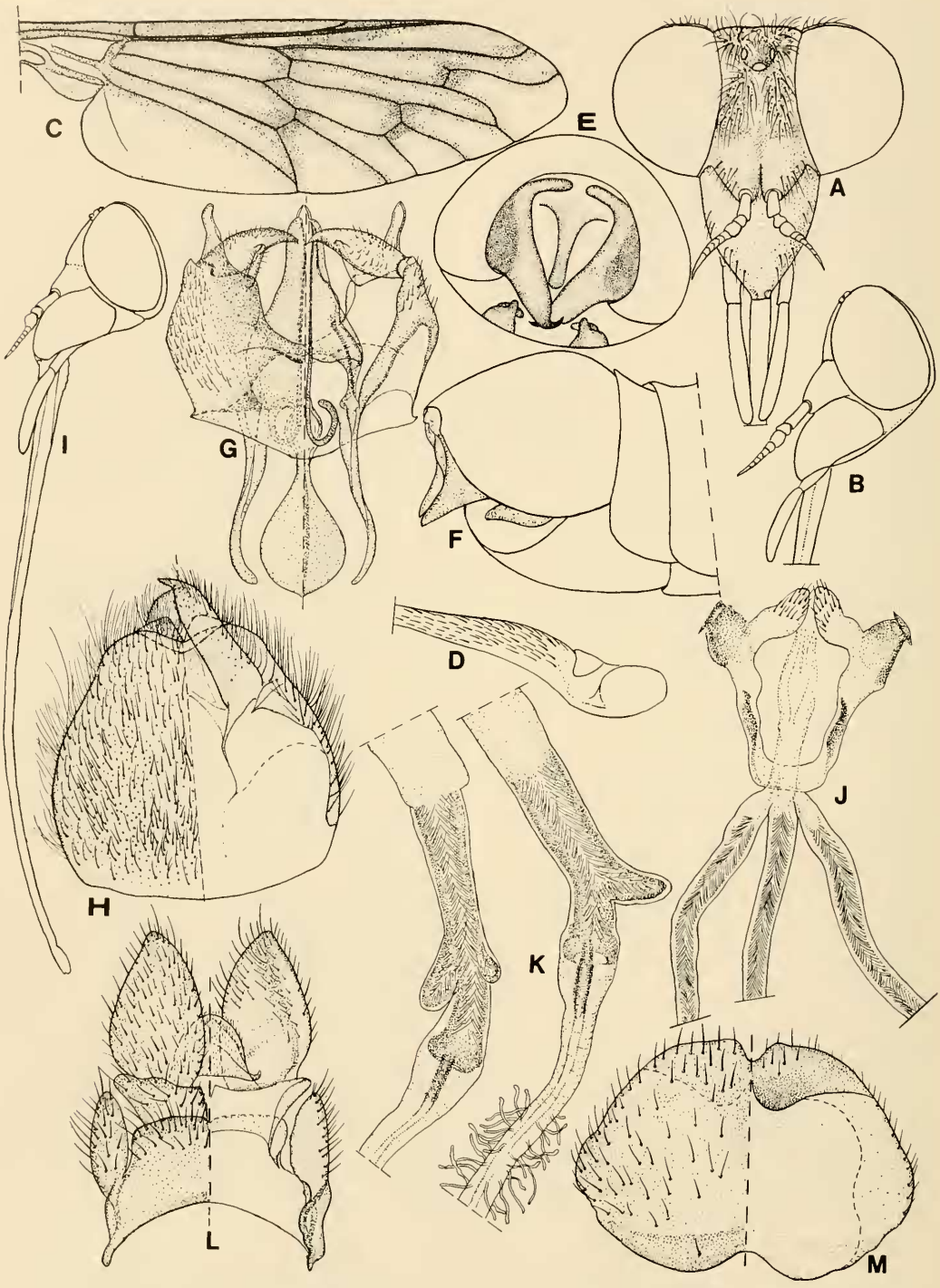

FIGURE 8. *Mycteromyia conica* (Bigot). Male (*A–H*), female (*I–M*). *A*. Head. *B*. Head in profile. *C*. Wing. *D*. Basicosta. *E*. Genital appendages, caudal view. *F*. Same, lateral view. *G*. Gonapophyses, aedeagus and dististyli. *H*. Epandrium and cerci. *I*. Head in profile. *J*. Genital fork and spermathecal ducts. *K*. Sclerotized portion of spermathecal ducts. *L*. Genital appendages. *M*. Sternite VIII and gonapophyses.

Mycteromyia etcheverryae Coscarón and Philip, new species
(Figure 7*H–L*)

DIAGNOSIS.—Large brown species, very close to *M. conica* (Bigot) but males with shorter cerci, and females with caudal spermathecal ducts shorter with short nonsclerotized diverticles cephalad as shown in respective figures.

DESCRIPTION.—Holotype male. Length 17 mm, wing 16 mm, proboscis 10 mm, ratio palpus:wing 1:9. Front and face gray pollinose, triocellar tubercle raised in mid-vertex, and sides of snoutlike face brown. Antennae, palpi, and proboscis dark brown. Thorax brown, dorsally with grayish and pale-brown stripes. Beard, pleura, and coxae I with pale pilosity. Wings as in *M. conica*. Legs dark brown with black hairs, intermixed with longer pale ones on coxae and femora dorsally. Abdomen dark brown with a middorsal stripe of white, elongated triangles; outer tergal incisures white haired.

Allotype female. Resembles male but reddish brown with thorax, legs, and abdomen lighter than in type. Length 15.5 mm, wing 13.5 mm, proboscis 8.5 mm, ratio palpus:wing 1:9. Genitalia: St. VIII as in *M. conica*; cerci rounded, T. IX short with wide laterally sinuose flaps (Fig. 7*L*); genital fork not sclerotized basally but with peculiar, relatively short, robust, unsclerotized, caudal spermathecal ducts and small diverticles on the sclerotized cephalad portion (Fig. 7*K*).

Paratypes. Males are very similar in ornamentation to the holotype; lengths 15–16 mm, wings 14–17 mm, proboscides 8–17 mm, ratio palpus:wing 1:8–9. Genitalia: Visible cerci subtrapezoidal (Fig. 7*I*), shorter than in *M. conica* as shown in posterior view (Fig. 7*H*); in ventral view, subtriangular, with evident internal hooks (Fig. 7*J*); gonapophyses very similar to those of *M. conica*, but style of basistyle longer and apodeme of aedeagus wider than in *conica*.

TYPE-SERIES (all from CHILE).—Holotype male. *Valparaíso*: Quebrada San Jerónimo, 7.XI.1965 (Arrau) (CEEUC). Allotype female. *Valparaíso*: Quebrada San Jerónimo, 26.X.1965 (Montes) (CEECU). Paratypes: 4 males, same locality and date as holotype, but collected by Zapata; 1 male, same locality and date as holotype, but collected by Herrera. *Santiago*: 1 male, 1 female, El Canelillo, 17.X.1965 (Etcheverry).

COMMENTS.—This species resembles *M. conica* in ornamentation and size, but it is readily separated by differences as given in the key. We dedicate this species to María Etcheverry, enthusiastic Chilean entomologist, who loaned us much *Mycteromyia* material.

Genus **Silvestriellus** Brèthes

Silvestriellus BRÈTHES, 1910:473. [Type-species: *Silvestriellus patagonicus* Brèthes.]

DESCRIPTION.—Medium to small species with relatively short palpi and wing subhyaline with basicosta bare; male basistyli without tuberosities and styli very short, cerci without apical hooks, dististyle without heavy ridge or subapical protuberances on anteroventral borders, aedeagus thin distally with decurved hooks at sides of valves. Female genital fork well sclerotized basally; caudal ends of spermathecal ducts without lateral diverticles; St. VIII about as wide as high, not strongly sclerotized laterally.

INCLUDED SPECIES.—*Silvestriellus patagonicus* Brèthes, *S. schlingeri* new species, *S. martinezi* (Barretto and Duret), and *S. flaviventris* (Barretto and Duret).

Silvestriellus patagonicus Brèthes
(Figure 9*E–G*)

Silvestriellus patagonicus BRÈTHES, 1910:473; BRÈTHES 1921:22.

DIAGNOSIS.—Relatively large, reddish-brown species with yellowish pollinosity on thorax and appendages, wings subhyaline and with very faint clouds on cross veins. Head profile, front, and palpus as figured (Figs. 9*E*, 9*F* and 9*G*). Length 15 mm, wing 11 mm.

MATERIAL EXAMINED (all from ARGENTINA).—*Santa Cruz*: Holotype, female?, near Santa Cruz, -.XII.1890 (MACN). *Chubut*: 1 female?, Puerto Madryn, -.XI.1932 (Paschetto) (MZSP).

COMMENTS.—Unfortunately, the type is badly damaged; missing are antennal flagella, one palpus, and almost the entire abdomen, and in the specimen from Chubut, abdominal segments 3–10 are missing. Small median grayish-pollinose triangles occur on T. I and T. II. The sex is uncertain in both specimens. Wing 11.5 mm, proboscis 8.5 mm, ratio palpus:wing 1:20. The relatively short palpi (Figs. 9*E* and 9*G*), wide front (Fig. 9*F*), and brownish coloration, plus probably distinctive genitalic characters of presumed related Argentinian species, impel us to revive this genus for a distinctive group in the new tribe Mycteromyiini. These flies are so far known only from Argentina.

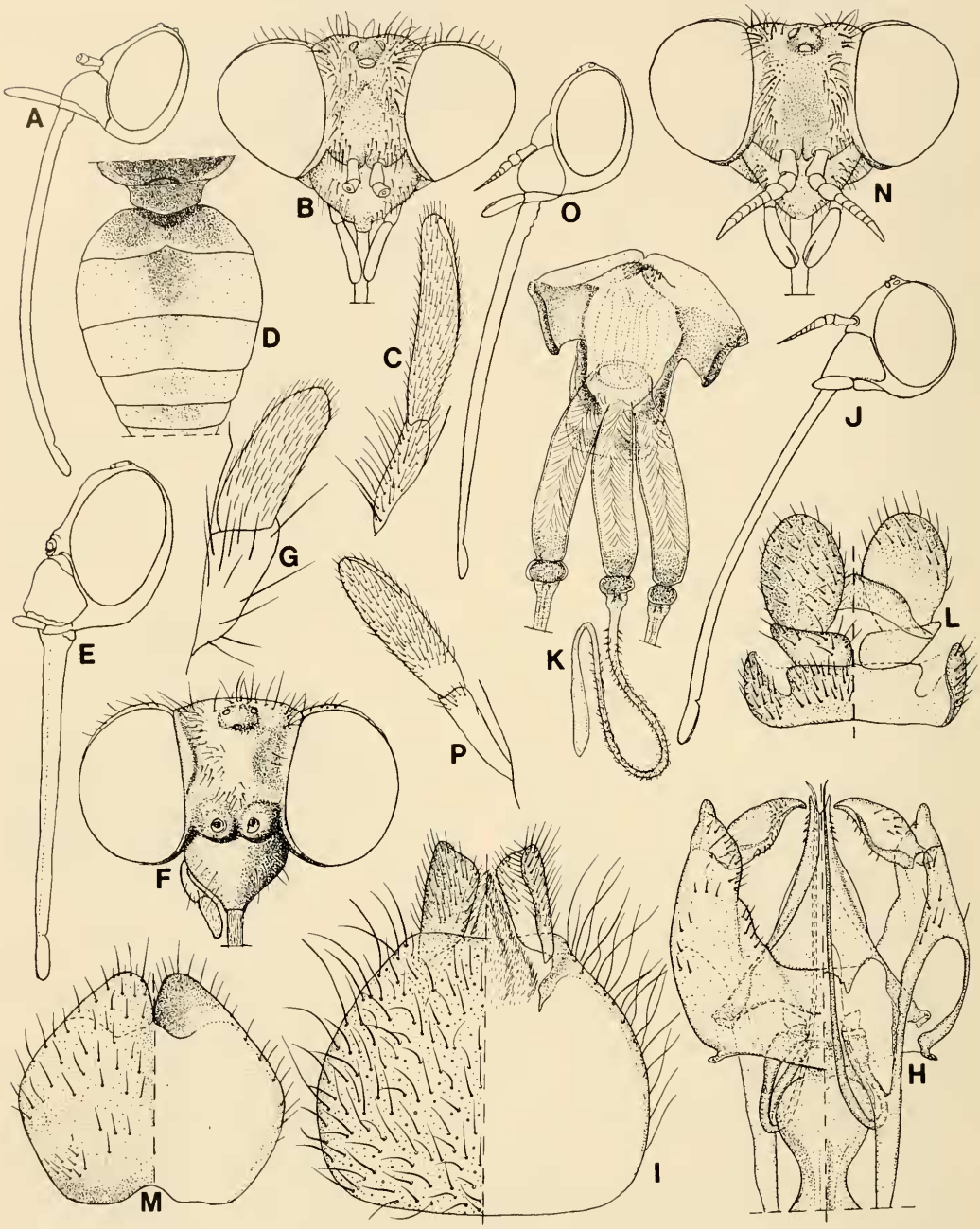

FIGURE 9. *Silvestriellus flaviventris* (Barretto and Duret), male. *A*. Head in profile. *B*. Head. *C*. Palpus. *D*. Abdomen, dorsum. *Silvestriellus patagonicus* Brèthes, female? *E*. Head in profile. *F*. Head. *G*. Palpus. *Silvestriellus schlingeri* new species. Male (*H–J*), female (*K–M*). *H*. Gonapophyses, aedeagus and dististyli. *I*. Epandrium and cerci. *J*. Head in profile. *K*. Genital fork and spermathecal ducts. *L*. Genital appendages. *M*. Sternite VIII and gonapophyses. *Silvestriellus martinezi* (Barretto and Duret), female. *N*. Head. *O*. Head in profile. *P*. Palpus.

Silvestriellus schlingeri Coscarón and Philip, new species
(Figure 9*H–M*)

DIAGNOSIS.—Small- to medium-sized, dark brown species with mid-abdominal row of discontinuous triangles and lateral incisures pale haired; palpus II about one-half the length of the antennal flagellum.

DESCRIPTION.—Holotype male. Length 11 mm, wing 9 mm, proboscis 4 mm, ratio palpus:wing 1:18. Front, face, scape, pedicel, and palpus gray pollinose, ocellar tubercle brown, flagellum blackish brown; hairs of front grading from black above to grayish yellow below, extending onto face. Palpi similar to those of *S. martinezi*, but a little shorter and more acuminate apically; palpal hairs black, beard white; thorax and legs gray pollinose; hairs on mesonotum brownish gray, erect, paler on pleura, coxae and femora, mostly blackish on tibiae and tarsi. Wings subhyaline, veins dark brown, and weakly clouded on cross veins. Abdomen gray ventrally with paler incisures and vestiture. Genitalia: Cerci in slide view without base projected into epandrium (Fig. 9*I*); dististyli weakly concave caudad (more flattened, without the typical spoon-shape shown in previous genera) (Fig. 9*H*).

Females: In agreement with males but are more grayish; lengths 11.5–12 mm, wings 9–9.5 mm, proboscides 5–5.5 mm, ratio palpus:wing 1:22–24. Profile of head (Fig. 9*J*) a little less convex than in holotype; abdomens more elongated. Genitalia: Cerci subovoid, hypoproct (St. X–XI) short and wide, T. IX with flaps smooth laterally (not sinuous) (Fig. 9*L*); caudal spermathecal ducts robust, with reduced sclerotization (Fig. 9*K*); St. VIII relatively narrow basally and gonapophyses in middle (Fig. 9*M*).

TYPE-SERIES (all from ARGENTINA).—Holotype male, allotype female, and 2 female paratypes. *Chubut*: 20 km N Malaspina, 500 m, 13.XII.1966 (Schlinger and Irwin) (MNHN, paratypes in CAS and MLP). *Neuquén*: 2 male paratypes, Las Plumas, 450 m, 17.X.1974 (Gentili) (MLP); 1 female paratype, S. M. de los Andes, 18.II.1958 (Foerster) (LLP).

COMMENTS.—This species resembles *S. martinezi*, but the brownish wing, absence of median triangles, and the head in profile more convex distinguish *martinezi*. *Silvestriellus patagonicus* is larger and more reddish brown; *S. flaviventris* has mostly yellowish-orange abdomens, and cerci basally more elongated. This species is named for Dr. E. I. Schlinger of the University of California, Berkeley, who generously provided most of the material for study.

Silvestriellus martinezi (Barretto and Duret), new combination
(Figure 9*N–P*)

Mycteromyia martinezi BARRETTO AND DURET, 1954:209.

DIAGNOSIS.—Medium-sized, grayish-brown species without the usual mid-abdominal triangles, wing with brownish-margined veins. Palpus robust (Fig. 9*P*), shorter than antennal flagellum (Fig. 9*O*). Head as figured (Fig. 9*N*). Lengths 12–12.5 mm, wing 10.5 mm, ratio palpus:wing 1:17.

MATERIAL EXAMINED (all from ARGENTINA).—*Buenos Aires*: Holotype and 1 female paratype, Estancia Barrau, -.XI.1946 (Martinez) (MZSP).

Silvestriellus flaviventris (Barretto and Duret), new combination
(Figure 9*A–D*)

Mycteromyia flaviventris BARRETTO AND DURET, 1954:210.

DIAGNOSIS.—Relatively small species with peculiar yellowish-orange abdomen and median dark stripe not well defined nor enclosing pale triangles, wing with brownish-margined veins and accentuated spur vein. Cerci elongated basally into epandrium. Front, profile of head, palpus, and abdomen as figured (Fig. 9*A–D*). Length 9 mm, wing 8 mm, proboscis 4.5 mm, ratio palpus:wing 1:11.5.

MATERIAL EXAMINED (from ARGENTINA).—*Buenos Aires*: Holotype male, Estancia Barrau, -.XI.1946 (Martinez) (MZSP).

COMMENTS.—The removed genitalia of this type have unfortunately become lost. However, the describers' drawings permit assignment to the revived genus *Silvestriellus*. This species closely resembles *S. schlingeri*, but is differentiated as above.

Silvestriellus sp.

Barretto and Duret (1954:204) described a small brownish male with long spur vein from Gral. Roca, Rio Negro, Argentina, as *Mycteromyia cinerascens* (Bigot). The descriptions and figures disagree with our interpretation of *cinerascens* and other known species. The genitalic drawings indicate that the species should probably be included in *Silvestriellus*.

The incomplete ornamentation, as revealed in the original description does not match that of any known species, and the specimen is too badly broken, with critical parts missing, to permit further characterization or confident assignment.

Tribe Scionini

Genus **Caenopangonia** Kroeber

Caenopangonia Kroeber, 1930b:211. [Type-species: *Diatomineura hirtipalpis* Bigot.]

Description.—Species medium to large in size, yellow to dark brown in color; abdomen elongated with fleshy or rigid integument, wings elongated with clouds on cross veins, first posterior (R_5) cells closed and petiolate; spur veins present; eyes bare, unicolorous; three ocelli on vertex; eyes in male dichoptic and facets not enlarged above. Female: Front approximately as wide as high and convex in profile, without callus and no evident transverse sulcus between lower front and subcallus; face very short, generally with a depression above base of proboscis, which is hinged and long, with fleshy, well-tracheated labella; antennae subulate, flagella 6–8 annulate; palpi cylindrical or subclavate with basal articles relatively long, second with long hairs and deep sensorial grooves apically, and containing only a few "sensorial microscopic organelles"; maxillae nonserrated.

Male genitalia with long flagella and aedeagus with round to elongate apodeme; dististyli subcylindrical, apically rounded or truncate in form of two small lobes; female genitalia similar to other Pangoniini with distal spermathecal ampullae not sclerotized, bulbous, and caudal ducts of spermathecae sometimes very wide.

Included Species.—*Caenopangonia hirtipalpis* (Bigot), *C. brevirostris* (Philippi) and *C. asper* (Philip).

Caenopangonia hirtipalpis (Bigot)

(Figure 10*A–E*)

Diatomineura hirtipalpis Bigot, 1892:619.
Caenopangonia hirtipalpis (Bigot), Kroeber 1930b:221.
Mycteromyia edwardsi Kroeber, 1930a:131.
Mycteromyia bejaranoi Barretto and Duret, 1954:207, new synonymy.

Diagnosis.—A variable, medium-sized, dark brown species with a very short proboscis (Fig. 10*A*), relatively wide, parallel-sided front elevated basally; fumose wings darkened on cross veins; abdomen brown with dark hairs and mid-row of pale triangles mostly not crossing tergites adorned with silky whitish hairs, and the latter also on lateral incisures.

Description.—Male. Lengths 9–13 mm, wings 9–12 mm, proboscides 4–5 mm, ratio palpus:wing 1:11–19.5. Genitalia: Visible cerci rounded; posterior view (Fig. 10*B*); in slide view, elongated, but less so than short portion of epandrium (Fig. 10*C*). Basistyli (Fig. 10*D*) without lateral expansions, dististyli truncated distally with small mesial notch (Fig. 10*E*).

Female. The only specimen available is a little lighter brown with triangles and lateral incisures well defined, the former crossing tergites. Length 12 mm, wing 11 mm, proboscis 4.5 mm, ratio palpus:wing 1:13.7. Genitalia: No significant differences from *C. brevirostris*.

Material Examined.—CHILE. *Osorno*: 1 male, Pucatrihue, -.II.1966. *Cautín*: 1 male, 20 km E Temuco, 8.1.1951 (Ross and Michelbacher). *Arauco*: 1 male, Tres Picos, 6.II.1967 (Casal); 1 male, Pichinahuel, Cord. Nahuelbuta, 1–15.1.1959 (Peña); Pillim Pili, 15.1.1954 (Peña). *Malleco*: 1 male, Lonquimay, 13.1.1966; 1 male, Lonquimay, Marimenuco, 1.1.1968 (Peña). *Concepción*: 1 male, Parque Bot. Hualpen, 10–15.II.1970. *Ñuble*: 1 male, 1 female, Las Cabras, 6–31.1.1963 (Peña); 3 males, Las Trancas, 23–29.I.1967 (Peña); 1 male, Las Trancas, -.II.1969 (Peña); 1 male, Las Trancas, -.1.1965 (Herrera); 1 male, Las Trancas, 28.I.1967 (Schlinger). *Curicó*: 6 males, El Coigual, 20–26.I.1964 (Peña); 1 male, El Coigual, 11.1.1956 (Peña); El Buchen, 8–9.1.1961. ARGENTINA. *Neuquén*: Holotype male of *Mycteromyia bejaranoi*, Pucara, S. M. de los Andes, -.XII.1948 (Schajovskoy); 3 male paratypes of *M. bejaranoi*, same data as holotype but collected 22.XII.1950, -.XI.1952, and 5.1.1951.

Caenopangonia brevirostris (Philippi), new combination

(Figure 10*F–J*)

Mycteromyia brevirostris Philippi, 1865:713.

Diagnosis.—The type is lost but the original description permits the identification of our material. Medium to large, reddish-brown species without prominent abdominal pattern, with no or only small median triangles, and very short face, as discussed by Philip (1968) and Kroeber (1930a).

Description.—Female. Lengths 11.5–14 mm, wings 11–12.5 mm, proboscides 4–4.5 mm, ratio palpus:wing 1:8–13. Body and appendages mostly light brownish-gray pollinose with black hairs on head and its appendages, pleura, and legs; venter pale haired. Well-preserved specimens have mid-abdominal rows of pale-yellow triangles and narrow, lateral, pale incisures. Head

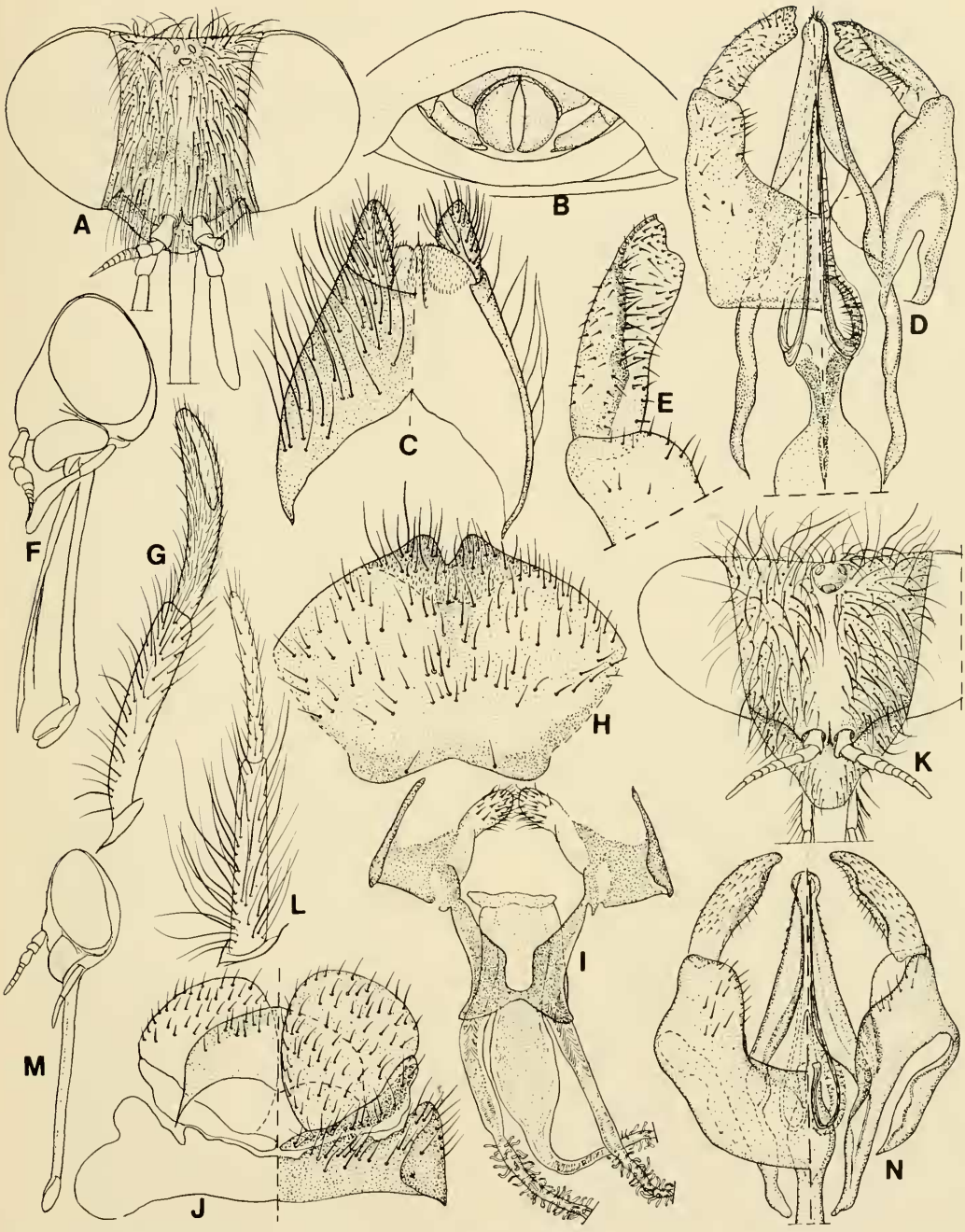

FIGURE 10. *Caenopangonia hirtipalpis* (Bigot), male. *A*. Head. *B*. External genital appendages, caudal view. *C*. Epandrium, cerci and ventral plate of proctiger. *D*. Gonapophyses, aedeagus and dististyli. *E*. Dististyle. *Caenopangonia brevirostris* (Philippi), female. *F*. Head in profile. *G*. Palpus. *H*. Sternite VIII and gonapophyses. *I*. Genital fork and spermathecal ducts. *J*. Genital appendages. *Caenopangonia asper* (Philip), male. *K*. Head. *L*. Palpus. *M*. Head in profile. *N*. Gonapophyses, aedeagus and dististyli.

profile and palpus as figured (Figs. 10*F* and 10*G*). Genitalia: St. VIII and gonapophyses well sclerotized basally (Fig. 10*H*); genital fork with short caudal spermathecal ducts and abundant spines on comb (Fig. 10*I*); cerci subtriangulate, T. X very narrow and T. IX wide, laterally expanded (Fig. 10*J*).

MATERIAL EXAMINED (all from CHILE).—1 female, Chile, "Alte Sammlung" (NMW). *Osorno*: 3 females, Pucatrihue, -.I.1968 (Peña). *Arauco*: 1 female, Caramavida, 30.I.1967 (Peña); 1 female, Pillim Pili, 2–5.II.1959; 3 females, Nahuelbuta, 20 km W Caramavida, 30.I.1967 (Schlinger). *Pichinahuel*: 1 female, Cord. Nahuelbuta, 28.I.1954. No males available.

COMMENTS.—The variation in size and ornamentation of our inadequate series of specimens, some of them with variable median triangles, suggests that as more material becomes available, this species may be synonymized with the sympatric and also widely variable *hirtipalpis*.

Caenopangonia asper (Philip), new combination
(Figure 10*K–N*)

Mycteromyia asper PHILIP, 1958:65.

DIAGNOSIS.—Small- to medium-sized, dark brown species having broad yellow, lateral abdominal incisures and mid-row of continuous pale triangles with wide bases. Face in profile, moderately produced (Fig. 10*K*), palpus II relatively thin and short (Fig. 10*L*), antenna with basal segments and flagellum more slender than usual.

DESCRIPTION.—Male. Length 10 mm, wing 9.5 mm, proboscis 4 mm, ratio palpus:wing 1:13.2. Genitalia: Cerci resemble those of *C. hirtipalpis* but more elongated, about as long as mid-longitudinal length of epandrium; gonapophyses laterally expanded, and dististyli acuminate but with blunt apexes (Fig. 10*N*).

Female. We now have previously unknown females that can be associated readily with males. Lengths 10.5–12 mm, wings 10–11.5 mm, proboscides about 4 mm, ratio palpus:wing 1:16–21. Genitalia: Compared with females of *C. brevirostris*, St. VIII has a narrower base, gonapophyses more robust with deeper mesial emarginations, and T. IX larger; genital forks with bases not mesially sclerotized; distal portions of spermathecae subovoid, relatively large and lightly sclerotized.

MATERIAL EXAMINED (all from CHILE).—*Coquimbo*: 1 male, 2 females, Fray Jorge, 4–5.XI.1957 (Peña); 1 female, Fray Jorge, 9.X.1971 (Pino).

COMMENTS.—The pointed dististyli and the laterally expanded gonapophyses in males, bulbous and distally expanded spermathecae in females, plus the narrower convergent fronts could justify a different subgenus than for *hirtipalpis* and *brevirostris* when more material becomes available for assessment.

Species Incertae Sedis

Mycteromyia robusta Kroeber
Mycteromyia robusta KROEBER, 1930b:219.

The description of *robusta* appears to indicate it as belonging to the genus *Fidena*, NOT *Mycteromyia*, based on such characters as: Front widely divergent below, not parallel-sided or convergent as in *Mycteromyia*; palpi differ in shape—blade or knife-shaped; body predominantly black, the legs red; abdominal pattern unlike *Mycteromyia* with first three tergites reddish brown on sides, remainder black with pale incisures; venter reddish brown with pale hairs. The wings are stated only to be fumose without mention of "punctaugen" that are always mentioned by Kroeber in other species of the group. Type locality and distributional data were not given.

KEY TO SPECIES

1a. Face produced, snoutlike (Figs. 2*A*, 3*A* & *D*; 4*A* & C; 6*A* & *B*; 7*A* & *B*; 8*A*, *B*, & *I*; 9*B*, *F*, & *N*); proboscis elongated, about ½ wing length, labella chitinized; apical segment of palpus with short hairs, and an elongated dorsal "sensorial" groove (Figs. 2*C*; 3*C*; 4*E*; 7*C*; 9*C*, & *P*); abdomen relatively attenuated caudally, female in profile with cerci longer than St. VIII (Fig. 3*E*); in male, with genitalia bulbous (Figs. 1*D* & 2*E*) (genitalia distinctive in both sexes on tribal level. Tribe Mycteromyiini new (*Mycteromyia* Philippi, *Promycteromyia* new genus, *Silvestriellus* Brèthes) 2

1b. Face shorter, not snoutlike (Figs. 10*A*, *F*, *K*, & *M*); proboscis extending less than ½ wing length, labella fleshy; palpus more hairy with a short subapical "sensorial" pit (Fig. 10*G* & *L*); abdomen with normal tabanid appearance, genitalia with normal pangoniine struc-

ture, not terminally bulbous in males. Tribe Pangoniini (*Caenopangonia* Kroeber) 16

2a. Abdomen (female) almost entirely reddish orange with narrow median dark line (Fig. 9*D*); size small (length 9 mm, wing 8 mm) (Argentina; Buenos Aires) ..... *S. flaviventris* (Barretto and Duret)

2b. Species with different coloration and pattern, generally larger than 9 mm long 3

3a. Species with distal article of palpus very short (0.4–0.6 mm) (Figs. 9*E, J,* & *O*); ratio palpus:wing over 1:11 4

3b. Distal article of palpus over 0.7 mm; ratio palpus:wing less than 1:11.3 6

4a. Length 15 mm, wing 11–11.5 mm; color reddish brown (southern Argentina) ..... *S. patagonicus* Brèthes

4b. Length between 11–12 mm, wing 8–10.5 mm; darker brown or dark grayish in color 5

5a. Species dark brown, with mid-tergal triangles well defined, and incisures with pale yellow hairs; wing subhyaline, length 10 mm; ratio palpus:wing 1:18–24 (Argentina; Chubut and Nequén ..... *S. schlingeri* new species

5b. Species dark grayish brown, without such well-defined triangles; wing veins brown margined, length about 10.5 mm; ratio palpus:wing 1:17 (Argentina: Buenos Aires) ..... *S. martinezi* (Barretto and Duret)

6a. Species pale yellowish to dark brown; large, over 15.5 mm in length 7

6b. Species light to blackish gray, sometimes yellow laterally; size between 10.5–15 mm 9

7a. Wings strongly fumose, length between 13–17 mm; body deep brown; palpi saber-shaped 8

7b. Wings very light, body yellowish to tawny brown, with dark brown, flattened spot on each tergite (Fig. 7*D*), palpi not saber-shaped (Fig. 7*C*) (Chile: Talca) ..... *P. xantha* new species

8a. Beard brownish gray. Visible male cerci elongated, subtriangulate (Fig. 8*F*); female caudal spermathecal ducts elongated (Fig. 8*J*) with large diverticles well sclerotized on the cephalad portions (Fig. 8*K*) (central Chile) ..... *M. conica* (Bigot)

8b. Beard white. Visible male cerci robust, subtrapezoidal (Fig. 7*G*); female caudal spermathecal ducts short and robust, with small unsclerotized diverticles on caudal portions (Fig. 7*J*), and T. IX short (Fig. 7*I*) (Chile: Valparaíso and Santiago) ..... *M. etcheverryae* new species

9a. Species blackish above and below, T. I–II with contrasting pale pile (Fig. 1*A*) (Chile: Coquimbo and Atacama) ..... *P. philippii* (Philip)

9b. Species grayish brown, light to dark gray or yellow; T. I–II not with special pale pilosity 10

10a. Small species, wing length 8.5–9 mm; palpi short, under 1.0 mm; ratio palpus:wing 1:9–11.5; body gray with erect whitish-yellow hairs; visible male cerci rounded or truncated (Fig. 6*D*) (Chile: Coquimbo) ..... *P. penai* new species

10b. Larger species, wing over 9.3 mm (except some males of *cinerascens*); visible cerci trapezoidal-shaped (Fig. 5*A*) and palpi longer, over 1.0 mm; ornamentation variable, if gray then with erect pale hairs 11

11a. Body coarsely pale pilose dorsally with accentuated woolly appearance in males overlying light brown integument; beard and thoracic hairs whitish; female with a mid-abdominal row of narrow, pale triangles flanked by 2 submedian stripes of reddish-brown pilosity (Fig. 4*F*) (Chile: Valparaíso and Santiago) ..... *P. eriodes* (Philip)

11b. Body without this combination of characters, sometimes yellowish or, if gray, not with woolly appearance 12

12a. Abdomen mostly gray without yellowish sides dorsally and with small submedian paired spots on T. II–IV; male cerci wide, and little constricted (Fig. 5*G*); female, length about 13 mm, wing 11 mm (Chile: Aconcagua) ..... *P. pechumani* new species

12b. Abdomen gray with yellow sides dorsally 13

13a. Male with visible cerci rounded (Fig. 6*G*);

female, length over 13.5 mm, wing over 12 mm (Chile: Santiago and Curicó) ..... *P. murina* (Philippi)

13b. Male with visible cerci obviously pointed (Figs. 2*F*; 3*I*; & 5*A*); female length less than 12.5 mm, wing less than 12 mm 14

14a. Male abdomen predominantly yellow including yellow-brown venter; female darker and tergites more gray laterally (Chile: Coquimbo) ..... *P. galbina* new species

14b. Male abdominal tergites not totally yellowish, at least T. III–VI with prominent, dark gray basal bands; female, likewise but venter dark grayish brown 15

15a. Male with very long and pointed visible cerci (Fig. 3*I* & *K*); female, abdomen dark laterally (Chile: Coquimbo) ..... *P. derocerca* new species

15b. Male cerci shorter and less pointed, trapezoidal-shaped (Fig. 5*A*); female abdominal triangles crossing tergites and with relatively wide bases, flanked by paired submedian grayish-brown dashes, laterally gray with white hairs on outer corners (Chile: Santiago and Atacama) ..... *P. cinerascens* (Bigot)

16a. Abdomen light reddish brown with gray incisures; legs unicolorous, yellowish red (Chile: Osorno and Arauco) ..... *C. brevirostris* (Philippi)

16b. Abdomen dark brown, occasionally with light-yellow or gray isolated spots; legs with at least femora darker than preceding 17

17a. Abdomen dark brown with yellow posterolateral areas about ½ width of tergites in both sexes; face moderately produced (Fig. 10*K* & *M*); male dististyli pointed (Fig. 10*N*) (Chile: Coquimbo) ..... *C. asper* (Philip)

17b. Abdomen very dark brown, light outer corners of tergites usually more reduced, at least in males; face in both sexes less produced (Fig. 10*A*); male dististyli truncated (Fig. 10*D* & *E*) (southern Chile and Argentina) ..... *C. hirtipalpis* (Bigot)

Discussion and Conclusions

Based on exosomatic characters and especially on the morphology of the genitalia, we consider that the species previously assigned to *Mycteromyia* constitute a polyphyletic group.

In the following outline, the differences between these species are presented. They were formerly grouped because of the presence of hinged proboscides, combined with other characters that appear disparately in other Tabanidae, such as dichoptic eyes in males, presence in wings of isolated clouds, and of the first posterior (R_5) cells closed, and the nonhaematophagous habits of females.

Genera	Genus
Promycteromyia, Mycteromyia, and *Silvestriellus* (Tribe Mycteromyiini).	*Caenopangonia* (and genera of other tribes described in Pangoniinae).
1) Thorax, wings, and fore legs elongated (especially the coxae).	Thorax, wings, and fore legs not unusually elongated.
2) "Sensorial area" of palpus situated in a frontolateral groove (Figs. 2*C*; 3*C*; 4*E*; & 7*C*).	"Sensorial area" of palpus reduced to subapical pit (Fig. 10*G*).
Males	
3) Epandrium bulbous, exposed beyond segment VII (Figs. 1*A* & 2*E*), basally moderately concave (Figs. 1*C*; 2*H*; 3*K*; 5*B* & *H*; & 6*E* & *H*) or straight (7*J*; 8*H*; & 9*I*).	Epandrium normally enclosed within segment VII with deep concavity (Fig. 10*C*).
4) Cerci projected basally into inner epandrium (Figs. 1*C*; 2*H*; 3*K*; 5*H*; 6*E* & *H*; 7*J*; 8*H*; & 9*I*); external portions greatly variable in shapes (Figs. 1*B*; 2*F*; 3*I*; 5*A* & *G*; 6*D*, *G*, *I*; & 8*F*).	Cerci not so projected (Fig. 10*C*); external portions very constant in shapes.
5) Basistyle inwardly membranous (Figs. 1*D*; 2*I*; 6*F*; 7*E*; 8*G*; & 9*H*), and with conspicuous styli (also sometimes with tuberosities) (Figs. 1*D*; 2*I*; 3*B*; 4*F*; & 7*E* & *F*).	Basistyle inwardly not membranous (Figs. 10*D* & *N*), and with neither styli nor tuberosities.
6) Gonapophyses ventrobasally extended cephalad (Figs. 1*D*; 8*G*; & 9*H*).	Gonapophyses ventrobasally not so extended (Figs. 10*D* & *N*).
7) Dististyli subtriangulate, acute apically and concave dorsally, frequently with emarginations (Figs. 1*D*; 2*I* & *J*; 3*L* & *M*; 4*B*; 5*C* & *I*; 6*F* & *I*; 7*E* & *F*; 8*G*; & 9*H*).	Dististyli subcylindrical (Figs. 10*D*, *E*, & *N*).

Females

8) Genital fork lightly sclerotized basally (Figs. 3*G*; 5*D*; & 7*K*), caudal spermathecal ducts elongated (Figs. 3*G*; 5*D*; & 8*J*) or thickened (Fig. 9*K*), generally with peculiar sclerotized portions cephalad (Figs. 1*E*; 3*G*; 4*G*; 5*D*; & 8*K*).	Genital fork well sclerotized basally with normal caudal spermathecal ducts, without special sclerotized portions (Fig. 10*J*).
9) St. VIII with lateral emarginations on base (Figs. 4*H* & 5*E*).	St. VIII without lateral emarginations (Fig. 1*I*).
10) T. IX frequently with large lateral expansions (Figs. 1*F*; 3*H*; 4*I*; 5*F*; 6*J*; 7*L*; & 8*L*).	T. IX without such expansions (Fig. 10*J*).
11) T. X frequently undivided (Figs. 1*F*; 3*H*; 4*I*; 5*F*; & 6*J*).	T. X always divided (Fig. 10*J*).

We consider that this combination of tabulated characters justifies the placement of the genera *Promycteromyia*, *Mycteromyia*, and *Silvestriellus* in a separate tribe. We had considered establishing a new subfamily, based especially on the distinctive morphology of the genitalia, but our ignorance of the immature stages, and the fact that we have not accomplished an anticipated detailed worldwide revision of the tribes have restrained us from this major action for the present.

Through the above analyses, we conclude that some of the characters, like the shapes of the dististyli, basistyle membranous inwardly, the presence of styli on the basistyle (plus its cephalad projection on ventral surface) are characters shared in common with the Pelecorhynchidae, and this reaffirms close relationship with primitive Tabanidae. Some characters that are only present in the new tribe Mycteromyiini, and which reinforce our hypothesis that this is a monophyletic group, are the shapes of the conspicuous caudal spermathecal ducts, the basolateral emarginations of St. VIII, and the shapes of the dististyli.

Minor but quite evident characters, such as the presence or absence of tuberosities, the divided or undivided T. X, the shapes and structures of caudal spermathecal ducts, the shapes of dististyli, aedeagus, and cerci, and the shapes and sizes of maxillary palpi, made possible this revision of the supraspecific taxa.

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Resumen: "Revisión de las especies incluídas en *Mycteromyia* por diferentes autores (Diptera-Tabanidae)."

Estudios morfológicos, especialmente basados en la genitalia, evidencian que las especies de tábanos primitivos del sur de América del Sur incluídos en *Mycteromyia* Philippi 1865, constituyen un grupo parafilético.

En base a ello se han redistribuido taxonómicamente de la siguiente manera: De las 13 especies asignadas anteriormente al género *Mycteromyia* ubicado en la primitiva tribu Scionini (subfamilia Pangoniinae), 3 son retenidas con reservas en dicha tribu en el revalidado género *Caenopangonia* Kroeber, nominadas *hirtipalpis*

(Bigot) (especie tipo), *brevirostris* (Philippi), y *asper* (Philip). Dos especies, *Pangonia obscuripennis* Philippi y *M. robusta* Kroeber no se han visto. Por las descripciones consideramos que no pertenecen a este grupo y por ello no se incluyen en esta revisión.

Las restantes 8 especies, además de otras 7 anteriormente no descriptas, son aquí asignadas a la nueva tribu Mycteromyiini de la subfamilia Pangoniinae con 3 géneros: *Promycteromyia* n.gen. para *Promycteromyia philippii* (Philip) (especie tipo, nueva combinación), *P. galbina* n.sp. (macho y hembra, Chile), *P. derocerca* n.sp. (macho y hembra, Chile), *P. eriodes* (Philip) (nueva combinación), *P. cinerascens* (Bigot) (nueva combinación), *P. pechumani* n.sp. (macho y hembra, Chile), *P. penai* n.sp. (macho y hembra, Chile), *P. murina* (Philippi) (nueva combinación), y *P. xantha* n.sp. (macho, Chile); *Mycteromyia* para *Mycteromyia conica* (Bigot) (especie tipo) y *M. etcheverryae* n.sp. (macho y hembra, Chile); y *Silvestriellus* para *Silvestriellus patagonicus* Brèthes (especie tipo), *S. schlingeri* n.sp. (macho y hembra, Argentina), *S. martinezi* (Barretto y Duret) (nueva combinación), y *S. flaviventris* (Barretto y Duret) (nueva combinación). *Mycteromyia bejaranoi* Barretto y Duret es sinonimizada con *D. hirtipalpis* Bigot.